ITALIAN ADRIATIC FLEET 1915–18

The fierce naval war with Austria-Hungary

Enrico Cernuschi

Illustrated by **Edouard A. Groult**

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CONTENTS

THE FLEET'S PURPOSE 4

Doctrine
The New Scenario
The Adriatic Curtain Rises

FLEET FIGHTING POWER 19

Ships and Weapons
Target Pola

HOW THE FLEET OPERATED 24

Command
Communications and Intelligence
Logistics and Economics

COMBAT AND ANALYSIS 30

The Fleet in Combat
The End of the War
Emergency Exit
Conclusion
Analysis
Aftermath

FURTHER READING 79

INDEX 80

THE FLEET'S PURPOSE

DOCTRINE

When northern and southern Italy were united in 1860, public opinion assumed that the new kingdom would be a state under French influence, as it had been during the Napoleonic wars. The British Government led by Viscount Palmerston, however, was aware of the many issues that still divided Paris from Turin – the fate of Rome and the Holy See was one, and the dependence on British sea power along the Italian peninsula to support any future colonial ambitions another. Palmerston was thus more circumspect and his viewpoint proved correct as the Franco–Prussian war in 1870 confirmed. From the summer of 1870, a de facto alliance bound Italy with what was going to become the new German state against the newly formed French Republic, an alliance which was later formalized in 1882 with the signing of the Triple Alliance with Austria–Hungary.

The threat of French naval warfare induced the *Regia Marina* (Royal Italian Navy, RM) to start construction, in 1871, of a totally new type of battleship armoured with steel belts and decks. From 1880, two Duilio-class ships replaced previous ironclads. This was followed by the production of two Italia-class ships – the forerunners of the battlecruiser – three Ruggero di Laurias, and three Re Umbertos commissioned between 1885 and 1891. These ships gave the RM a homogeneous, powerful battleforce, well-armed and faster than that of the French fleet (albeit at the sacrifice of armour) whose task in the Western Mediterranean was to hamper France's planned transfer of corps from Algeria to Marseille and Toulon. This was not a huge challenge as the French *Marine Nationale* (MN) consisted of just four second-generation battleships with inadequate stability, unprotected above the waterline, and put into service between 1883 and 1891. Germany only had a coastal defence navy at this point.

In Berlin, a possible war against France was planned based on lessons learnt from the 1870–71 war, when reliance on rigid railway schedules meant that days – and even hours – had made the difference between victory or defeat.

If Italian naval supremacy could force France to transfer troops from Algiers, not to Marseille, 410 miles away, but via the Atlantic to Bordeaux, 1,400 miles away, the delay of at least five days would be one of the keys to victory.

The *Regia Marina*

When new, more powerful guns were developed in the early 1890s, Italian naval doctrine changed from Sea Power (total victory by general decisive action) to Sea Denial (hit and run tactics). Between 1891 and 1911, France commissioned 25 pre-dreadnoughts (two of them lost to internal explosions in 1907 and 1911) and Italy eight 12in or 10in pre-dreadnoughts plus seven armoured cruisers whose 10in guns were able to pierce Schneider, Compound or Harvey-steel armoured belts at the battle ranges of 6,000–9,000yds used at Tsushima, the decisive battle of the Russo–Japanese War.

The Italians, as a result, had a battleline formed of battleships and armoured cruisers, all classified as *Navi da battaglia di 1ª classe*, which were faster than the French Marine Nationale capital ships and more powerful than their armoured cruisers, whose main armament was only 7.6in. Although its GDP was just two-thirds that of France between 1860 and 1914, Italy gained the upper hand in naval power without too much expense, with the Regia Marina costing merely a quarter of the Marine Nationale's budget. It was a fleet considered suitable for all purposes except in the event of a conflict against Britain.

The dreadnought battleship *Leonardo da Vinci*. Lost to an internal explosion on 2 August 1916, the wreck was refloated upside down on 17 September 1919 and righted by an inspirational piece of engineering on 25 January 1921. The original idea (January 1922) was to reconstruct her without the central turret, but two months later the programme was stopped for budgetary reasons. The ship had to be decommissioned in 1933 under the terms of the recently signed Washington Treaty. She was broken up in March 1923.

Austria–Hungary was Italy's other potential military problem during this period. It had the advantage of two very favourable borders: the Trentino–South Tyrol salient south of the Alps and the limestone Carso plateau to the north of the Adriatic which acted as a defence for Trieste. It also had the advantage of faster railway connections. At sea, however, it was a non-existent threat. Vienna had never had a Navy Ministry, just a Secretariat, with the Army the traditional senior service of the Habsburg Empire. In contrast, the House of Savoy in Italy had endorsed the RM since 1814. By 1826, it surpassed the Austrian Navy, both in numerical and broadside terms, and maintained its advantage thereafter. The battle of Lissa, fought on 20 July 1866, did not alter this balance despite the Austrian side being victorious. The day after seven Austrian ironclads engaged nine similar Italian counterparts, the RM still had ten ironclads to counter a beleaguered Austrian fleet (the Italian ironclad *Formidable* had been retired for two days after fighting the forts of Lissa on 19 July). The Austrian ironclads were damaged by approximately 167 direct hits, and needed repairs, while the Italian capital ships (about 70 direct hits) were all seaworthy after temporary repairs were carried out. With the Austrian garrison of Venice constantly besieged by the Italian Army on land and blockaded at sea by the RM, the strategic

Spezia, 15 January, 1915. The speed trials (22 knots) of *Conte di Cavour*. She was commissioned on 1 April 1915.

picture was similar to the aftermath of the battle of Jutland almost 50 years later.

Admiral Wilhelm von Tegetthoff, the hero of the battle of Lissa, who used ramming tactics so effectively, was an isolated figure in the Austrian Navy (from 1867 onwards known as the Imperial and Royal Navy, or k.u.k. Kriegsmarine). Since 1849, the Austrian Navy had adopted the coastal defence doctrine of the Danish Navy, whose personnel had reformed the service after its Italian officers and sailors deserted en masse in March 1848. Tegetthoff's aggressive style was the exception. The Austrian's approach was usually a defensive naval strategy and policy.

It was only in 1902 that things began to change when Vienna started to appreciate, after a series of exercises, that the k.u.k. Kriegsmarine's fleet didn't have a chance against the classic, four-12in-gun high-seas battleships being commissioned everywhere. Its three coastal battleships of the Monarch class were slow and armed only with 9.4in guns as were the six brand-new warships of the Habsburg and Erzherzog Charles 1 classes, still on the slips. Moreover, recent military manoeuvres were judged to be proof that the Italians could land in Istria and Dalmatia if necessary. A new battlefleet was certainly required, and fast. In addition, after 90 years of half-hearted attempts in the Middle East, Vienna still wanted to colonize the Sinai Peninsula whose international status was ill-defined. Two attempts were stopped by Britain, at El-Arish in 1903 and at Taba three years later, but for Vienna these were only setbacks, and they pursued this goal unsuccessfully until 1918.

Planning for the new fleet began in 1904 with the three Radetzky-class pre-dreadnoughts, which were laid down from 1907 and entered service between 1910 and 1911. A new series of exercises in 1906 had confirmed Vienna's worst nightmare about the possibility of successful invasions from sea. It is one of the many ironies of history that Italian forces concluded the exact opposite in 1908, after similar manoeuvres. It believed that landings from the sea, facing modern weapons – i.e. quick-firing field guns and machine guns – were impossible, as Gallipoli confirmed in 1915. On the basis of this, no Italian invasion plans were ever made during World War I, only a few minor raids and an effective whispering propaganda campaign threatening a landing near Pola or Sebenico.

Naval development was, however, progressing fast and a new generation of battleships, dreadnoughts, were being ordered by all powers. The new warships could find range quicker than the old four-12in battleships and were protected by the latest Krupp cemented armour. Winston Churchill, the new First Lord of the Admiralty, labelled pre-dreadnoughts as 'five-minute-ships', i.e. the time one could expect them to survive in battle. The dreadnought's advantage was subsequently increased by the effective analogue

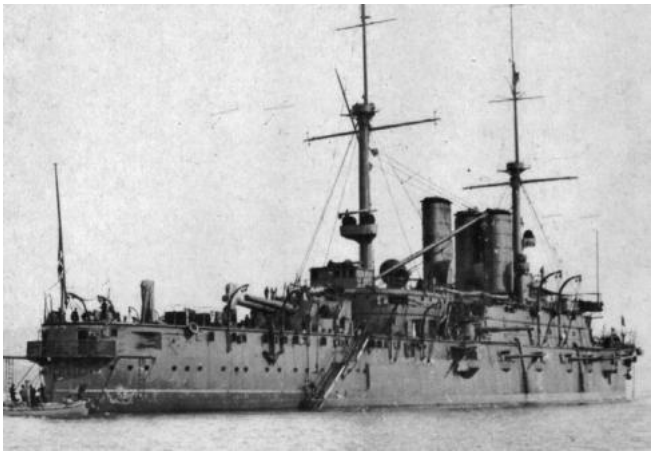
fire-control mechanisms that were introduced by Britain, Germany and the United States in 1914–15, which caused a further revolution enabling accurate fire up to 14,000yds and beyond.

Italy led the way in the Mediterranean, laying down, in 1909, the *Dante Alighieri*. She was to be followed by a sister ship, *Conte di Cavour*, but the next year, a new, more powerful design was ready and the name *Cavour* was given instead to the last of this new three-battleship class. Since 1909 the RM had also been developing an ambitious fire director. Although its understanding of the technicalities involved was advanced, the technology needed to build a practical device struggled to keep pace, and the first-generation fire-director (type Girardelli) was only introduced in 1919. France was in a similar position until 1919, when Paris resorted to buying a British-made device; while Austria–Hungary only began development in 1915 and was unable to find a solution before the end of the war. For the record, Germany never informed Vienna about its Imperial Navy's effective fire-control system.

The battleship *Dante Alighieri* was the first Italian dreadnought and the first in the world with triple gun turrets (a British design). Laid down in 1909, the elevation of the main armament was increased in 1910 to 27° to accommodate the introduction of a mechanical analogue fire-control computer which was only available in 1919 (Tipo Girardelli). She was decommissioned in 1928, three years before the terms stated by the Treaty of Washington.

Given the fire-control situation, the RM decided, in October 1910, to plan a future class of super-dreadnoughts whose big guns would be designed to engage the enemy at 16,000yds. This new class would have thick side armour while the deck remained anti-splinter thin (protection from plunging fire was still considered unnecessary at this range). A powerful main armament (12 15in guns in four triple turrets) and speed (28 knots) was a must. As with the French and Austro–Hungarian dreadnoughts, the 15in main armament would have the heavy shells and low velocity necessary to deliver superior kinetic energy at short ranges. As a stopgap solution, while the new battleships were under development, two slightly improved Cavours, *Andrea Doria* and *Duilio*, were ordered in 1912 and commissioned in 1915–16. In 1913, the 15in project finally became the Francesco Caracciolo class, now with only eight 15in guns. Four ships were ordered in April 1914, but never completed as construction was suspended in March 1916. After the battle of Jutland it was acknowledged that their 2in deck protection was outdated because of the new reality of long-range plunging fire. There was no opportunity to modify them as adequate deck armour would have increased the vessel's displacement too much for most of the Italian dry docks to take them, while the armoured belt would have become ineffective.

In 1910–12, Austria–Hungary laid down the four Viribus Unitis-class battleships. Their design, turrets included, was cramped and underwater protection ineffective. A never-realized follow-up, the so-called four Ersatz Monarch battleships, were ordered in 1914 and armed with ten 13.8in guns – however it seems that these, on paper at least, were not a viable prospect. The k.u.k. Kriegsmarine had few funds.



The pre-dreadnought *Regina Margherita* was a fast ship when she was laid down (20 knots, compared to the typical British 18), with thin side protection (6in), but made with Harvey steel which the Italian Terni factory treated according to the most up-to-date British Tressider process which improved the hardness of the plates. Trials confirmed they couldn't be pierced by 9.2in AP shells. The Regina Margheritas were considered armoured cruiser-killers capable of out-running French battleships and out-gunning the numerous Marine Nationale armoured cruisers.

Since the Middle Ages, Austria's GDP per capita had always been about half of Italy's; in 1914, it was $57 per annum compared to Italy's $108.[1] The Habsburg Empire's decisive asset was always its advantage in population (52 million as opposed to 35 million in Italy), although alliances such as those of 1859 and 1866 could solve this problem from the Italian side.

In 1910, France became the last of the Mediterranean trio to order dreadnoughts: the four lacklustre Courbet-class ships. These were followed by the three Bretagnes, completed in 1915–16, which were essentially a repeat of the Courbets, but with ten 340mm (13.39in) guns instead of twelve 12in. The Courbets had a broadside of only ten guns compared to the 12 similar guns of the Austro–Hungarians and the 13 of the Cavours. Their protection (and the Bretagnes') was inferior to the Viribus Unitis-class and their speed less than the Italian dreadnoughts.

Since 1912, the major naval powers, Britain, Germany and the United States, had been forging ahead with their well-balanced battlefleets including super-dreadnoughts (even though the 12in gun was understood, correctly, to lack punch against the new, thicker armour of the super-dreadnought battleships laid down from 1909), battlecruisers (the US Navy's only being authorized in 1916 and completed, later, as carriers), and from 1914, fire-directors which allowed long-range, lethal shooting against the soft-skinned armoured deck of dreadnoughts and battlecruisers. In a general action it was considered decisive to be able to cross the 'T' of the adversary and, among the three Mediterranean Navies, within their small range of envisaged actions, a couple of knots' edge would be enough to engage or avoid an action. The oceanic battlefleets used their battlecruisers for this task, made possible by the introduction of wireless on board. In the Mediterranean, the poor man's option was to use scouts, the first generation of fast (turbine-powered) and almost unprotected warships of around 3,500 tons' displacement, introduced by the Royal Navy in 1907. By 1909, they had evolved into the light cruiser with a limited armoured belt. The Austro–Hungarian Navy led the way with its *Admiral Spaun*, a ship based on a British design for export, but unfortunately built too early whose machinery was always a source of problems. She was followed by the three excellent Saïda-class ships. Italy had the very good *Quarto*, which was succeeded by the

1 The growth of real GDP between 1913 and 1929 was Italy 1.7% and Austria–Hungary 0.3%. The UK, in social and political crisis, was 0.7%. (Stephen Broadberry and Mark Harrison (eds), *The Economics of World War I: An Overview*, Cambridge University Press, Cambridge, 2009, p. 33; David S. Landes, *The Unbound Prometheus*, Cambridge University Press, 1969, p. 331.)

two Nino Bixio-class ships (*Bixio* and *Marsala*), whose over-ambitious machinery of American design was much less successful. Once more late to the party, France limited itself to a paper project for a 4,500-ton light cruiser.

In 1914, the RM ordered three 5,000-ton light cruisers of the Mirabello class, but the Allied naval blockade soon stopped imports of the high-tensile steel necessary for production of their hulls. With domestic production being insufficient, RM Chief of Staff (CoS) Admiral Paolo Thaon di Revel needed a solution and, based on what was readily available, the Ansaldo yard of Genoa proposed the construction of three light scouts (large destroyers the size of a British flotilla leader), the class again to be named Mirabello. They were sound and effective warships.

The three scouts *Marsala* (ahead), *Bixio* and *Quarto* in 1915. They were the eyes of the Italian battlefleet during World War I.

The k.u.k. Kriegsmarine also completed, in 1914, a similar design: *Ersatz Zenta*, a 4,950-ton warship, but laying down was suspended when war broke out in August 1914.

As the eyes of the battlefleet, the Italian and Austro–Hungarian scouts played a decisive role in their fleets' successes. Without them, the line of battle could be easily outmanoeuvred.

THE NEW SCENARIO

The new king of Italy, Vittorio Emanuele III, who succeeded his father Umberto I (assassinated on 29 July 1900) was far from a Germanophile. By the end of 1900, he had begun a successful rapprochement with France and played a decisive role in foreign and military policy. Under his influence, from 1905, the RM reoriented its attention to the Adriatic; the battlefleet remained, as usual, at Spezia in Liguria, but its doctrine changed. The Northern Adriatic has a shallow seabed (on average about 50 fathoms) while the Southern Adriatic is quite deep (more than 500 fathoms). The upper Adriatic was thus ideal for mine warfare – the new weapon tested during the recent war between Russia and Japan. In 1906, the Italian Admiralty introduced a new, automatic-laying version of the mine invented in 1901 by the RM officer Giovanni Elia. It replaced the previous slow, manual and often unsafe handling and deployment of the weapons.

Brindisi, spring 1918. The scout *Bixio* between the old pre-dreadnoughts *Dandolo* and *Sardegna*. These ancient battleships served, like *Italia* and *Re Umberto*, as local defence ships in Venice, Brindisi and Valona. *Dandolo* was altered to four 10in guns in 1895–98.

In the upper Adriatic, the naval war would be fought between two great bases: Venice (the trump card of the theatre with its immense shipyards and protected by its lagoon) and

Pola (or Pula, in modern Croatia), which had been, since 1848, the main Habsburg naval base. It would by necessity be a guerrilla war, fought with destroyers, torpedo boats (TBs) and submarines. In 1913, recently appointed RM Chief of Staff (CoS), Thaon di Revel, ordered 5,000 mines to be laid in preparation for a probable Adriatic war, a formidable number not only by Italian standards, but also by the Royal Navy's where stocks in 1914 totalled only 4,000.

Further south on the Italian coast, Ancona was a small harbour open to the winds and with very few facilities, which could be the base for, at most, torpedo boats and submarines.

In 1908, the construction of a new naval base began at Brindisi, Apulia, and from 1913, the port was able to receive large warships. This pre-empted where the main conflict at sea would be between Rome and Vienna in the ensuing years: control of Albania. The situation there had developed in 1860 and, from the end of the 19th century, Italy had maintained the upper hand in terms of economic influence. Vienna pushed back in 1909 using subversive methods and seemed to have gained the upper hand in March 1914 when the German Prince of Wied became King of Albania with a native gendarmerie led by Dutch officers. A large revolt followed two months later with open Italian approval, concerned as it was by the proximity of the Albanian coast to Brindisi and to their naval base of Taranto at the entrance to the Adriatic.

Control of the new kingdom would be decisive in allowing the k.u.k. Kriegsmarine to sortie from the Adriatic or not. Relations between Italy and Austria–Hungary, never an easy matter, worsened in June. In addition, by 7 July 1914, after the assassination of Archduke Franz Ferdinand in Sarajevo, all European capitals were aware of the opportunities for a land grab of different territories. Conflict was underway.

Off the port of Durazzo (now Durrës, Albania), which had been patrolled since 1913 by an international naval force, a RM squadron (armoured cruisers *San Marco* and *Vittor Pisani*) and a k.u.k. Kriegsmarine one led by the armoured cruiser *Sankt Georg*, confronted one another. The incident was conducted using formal courtesies but there were dirty tricks on both sides.

The Italian battlefleet was transferred in June from Spezia to Naples, anticipating future exercises in the Ionian Sea. The increasing pressure towards Vienna was evident. In the meantime, Austrian and German volunteers arrived in Albania.

On 23 July 1914, Vienna sent a harsh ultimatum to Serbia designed to provoke war, without consulting its Triple Alliance partners. Both Vienna and Berlin believed, at the time, that Britain would remain neutral throughout this. On 26 July, anticipating that Italy might be tempted to join the Entente (an informal understanding between France, Britain and Russia), the German ambassador informed Rome that Vienna could, perhaps, be persuaded to transfer Trentino

Austria–Hungary
Italian
Italian and A–H big-gun coastal batteries
Main bases for battleships
Pre-dreadnought and cruisers bases
Actions between A–H warships and RM armed trains
1. Ortona, 3 February 1916
2. Rimini, 15 February 1916 (In response to A–H aircraft bombing the town)
3. Grottammare, 23 June 1916
4. Bari, 27 July 1916 (In response to A–H aircraft bombing the town)
5. Sant'Elpidio a Mare, 5 November 1916
6. Rimini, 28 November 1917
Big guns batteries
Pola (12in and, from 1917, 16.5in)
Venice (12in and, from 1917, 15in)
Ancona (11in from 1916)
Brindisi (11in and, from 1917, 15in)
Taranto (11in)
Lussinpiccolo (8.2in)
Sebenico (8.2in)
Cattaro (8.2in)
15° E
20° E
45° N
40° N
Trieste
Venice
Fiume (Rijeka)
Pola
Lussinpiccolo
AUSTRIA
Adriatic Sea
Sebenico (Šibenik)
Ancona
ITALY
Lissa Is. (Vis)
Lagosta Is. (Lastovo)
Ragusa (Dubrovnik)
Cattaro (Kotor)
Durazzo (Durrës)
Brindisi
Taranto
Valona (Vlorë)
Tyrrhenian Sea
Ionian Sea
C. Spartivento
Sicily
Pantellaria
N
0
100 miles
0
100km

to Italy, on the basis of a compensation clause in the Alliance in the case of an alteration of the Balkan balance of power. It was what the Italian Foreign Minister, the Marquis of San Giuliano, wanted to hear, but Vienna – not having been consulted by the Germans about this proposal – answered the next day with a clear refusal.

The next day Berlin, trying to create unbroken friendly territory from Trieste to the Black Sea plus an easily defensible coastal sea route, asked the King of Greece to join the Triple Alliance, promising the Dodecanese Islands (occupied temporarily by Italy in 1912) except for Karpathos, as well as southern Albania, which had been infiltrated since early July by Greek volunteers. Germany also suggested that it was confident that it would be able to reach a satisfactory settlement of Greece's difficulties with Turkey. Rome was not informed about this proposal, which was against its well-known interests. Germany had for many years been on economically friendly terms with Athens, and the powerful foreign minister Georgios Streit and the Hellenic generals were in favour of the proposal (Prime Minister Venizelos was travelling in Germany at the time), but King Costantine refused, as British and French sea power left his country with little autonomy. In 1850, during the Dom Pacifico affair, the Royal Navy had blockaded maritime traffic with Greece for two months. It was a serious precedent.

On 28 July, the Turkish government responded positively to Germany's offers for an alliance with Berlin promising financial and technologic assistance, and the Kaiserliche Marine battlecruiser *Goeben*, at Pola for refit, was ordered to sail at once, leading to the famous dash to Constantinople. For its part, Vienna asked the Albanian Prince of Wied to join the Habsburg Empire in the conflict against Serbia, promising Kosovo in exchange. The situation at Durazzo in Albania, however, had deteriorated and revolt was on the cards. On 21 July 1914, Admiral Anton von Haus, the commander-in-chief of the k.u.k. Kriegsmarine, informed his government that in the face of an Italian naval landing in Istria and Dalmatia, the Navy would prioritize the defence of the Empire. It was thus necessary to recall his squadrons from Durazzo. The request was approved on 30 July and the next day Vienna offered Italy the town of Valona and 'something' in Anatolia at Turkey's expense, with the bonus of the Dodecanese islands (which were already in Italian hands). On 1 August, the Austro–Hungarian warships left Durazzo. The other Navies had sailed some days before and Italy remained alone to control the harbour. The change was immediate. Rome asked Prince Wied to accept the Italian protectorate; the king refused and his last tiny forces melted away within a month under the Italian naval blockade. He left Albania on the Italian gunboat *Misurata* on 3 September 1914 to return home. Meanwhile, the Italian battlefleet stayed near to

The armoured cruiser *San Giorgio* in 1911. Much more powerful than the French *croiseur-cuirassé*, the four Italian Pisas and San Giorgios with their 10in guns tried to counterbalance, like the three Garibaldis, the more numerous (25) Marine Nationale 7.6in armoured cruisers commissioned in 1895–1911. The two Austro–Hungarian (slower) 9.4in armoured cruisers *Kaiser Charles 1 VI* and *Sankt Georg* were similar to the Italian models.

the Strait of Otranto, to defend against another traditional problem, France.

The Italian landing at Valona 29 October, 1914. The area had actually been controlled by the RM and pro-Italy/ Albanian partisans since early September.

On 28 July, Vienna declared war on Serbia. The Italian Foreign Minister, San Giuliano, informed Berlin the next day, at 1.30am, of Italy's suspicions about a British declaration of war against Germany, but he was not heeded. The Italian Army and Navy were mobilized that day, following sealed orders, with a view to fighting a possible war against France. On the morning of 30 July, King Victor Emmanuele received the hard evidence (handwritten minutes by Prime Minister Asquith[2]) about Britain's real objectives regarding the new European crisis. He immediately informed Admiral Thaon di Revel (the Royal House of Savoy and the Thaon di Revels had been on close terms since the 16th century) who informed the government that a war against France and Britain was a very real and present prospect which had to be avoided. San Giuliano (who had that very day asked Berlin and Vienna for Trentino, plus Valona and southern Albania) was shocked, but had no choice but to align himself with Italian public opinion which had been anti-Austrian for many weeks.

On 1 August, Germany declared war on Russia (Austria–Hungary would do the same on 6 August). On the evening of 2 August, Rome informed Europe's capitals and the United States of the country's neutrality. The French battlefleet (11 pre-dreadnoughts, led by the lone dreadnought *Courbet* – her sister *Paris* still being in the Atlantic) was only informed on 3 August, which avoided, for a short time, the execution of a traditional plan based on *Jeune École* theories: to bombard Italian towns before sailing for Toulon (the only Mediterranean harbour where coal and munitions could be supplied), and where, according to a similar Italian plan, the faster Italian battleforce would be waiting for them. Italy's fleet comprised dreadnoughts *Dante*, *Cesare*, *Leonardo da Vinci* and six pre-dreadnoughts, with two 26-knot scouts, while the nine French armoured cruisers could do, at most, 22 knots.

Paris and London ordered their fleets not to sail to Albania, to respect the Italian position there. Without a single shot, the Italian battlefleet (commanded by Admiral Amero d'Aste Stella) had overcome the traditional Italian military problem of too many enemies and gained control of the Strait of Otranto between Italy and Albania. On 29 September, the Italian Army sent a 'humanitarian' mission to take control of the city of Valona in southern Albania and on 29 October the RM occupied Saseno (an island dominating Valona Bay).

On 3 August 1914, Germany declared war on France. The next day Britain declared war on Germany, and on 4 August Russia proposed, for the first time, to ask Italy to join the Triple Entente (between France, Britain and Russia). On 5 August,

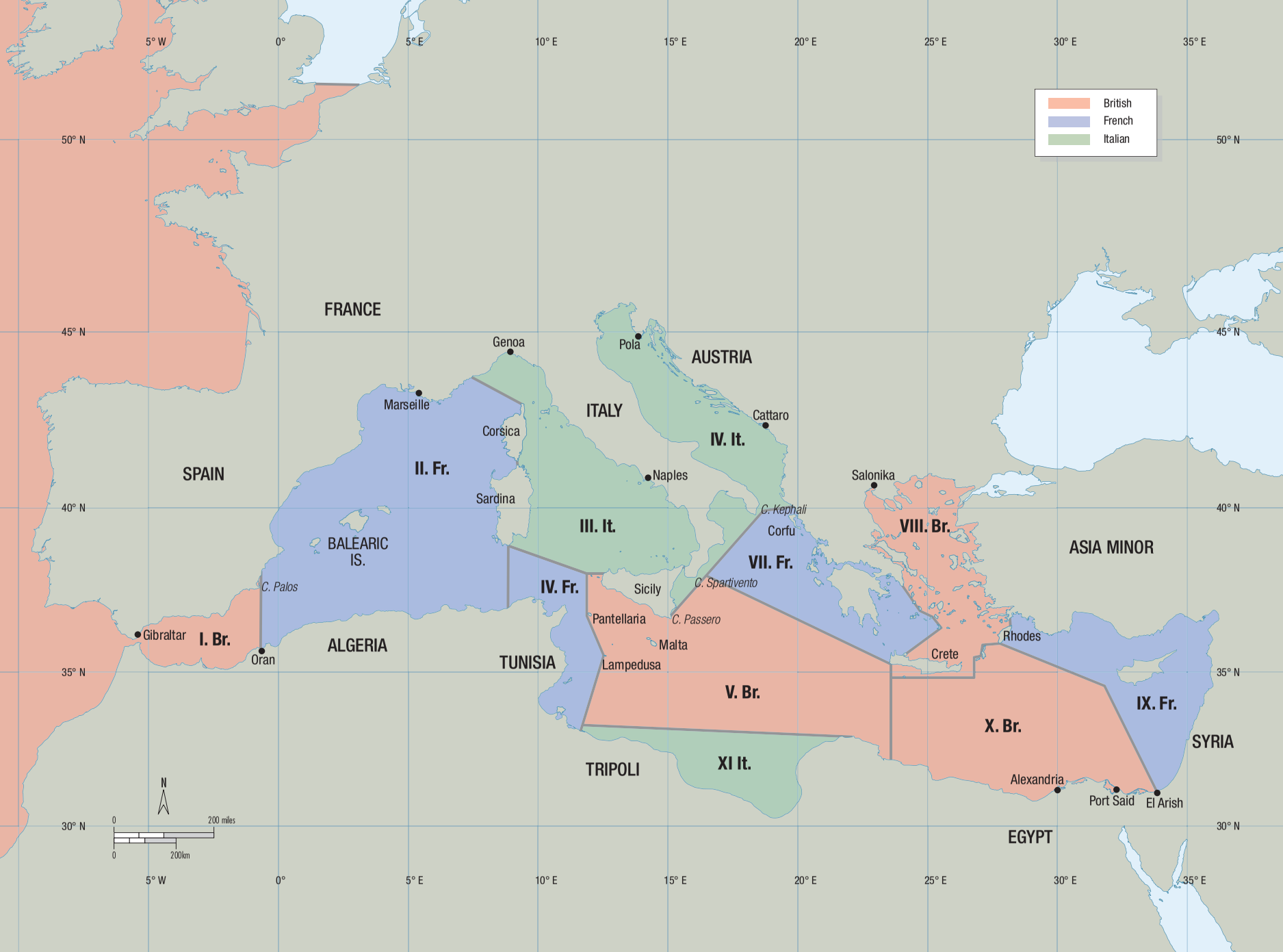
2 These were delivered to the monarch by Prince Lt Manfredi Gravina, the RM's top intelligence agent, after an adventurous 32-hour drive in a Bugatti from Calais to the royal residence of San Rossore, near Pisa.

Vienna was informed about the secret German–Turkish alliance and, two days later, the Germans asked Vienna to send their battlefleet to Albania, Greece and Turkey, even at the cost of a clash with the Italian battlefleet, now transferred to Messina, Augusta and Taranto. The Central Powers' (Germany and Austria–Hungary) chances were still good in Athens at this point, as the foreign minister Georgios Streit had threatened to resign if Greece refused the new, very generous German offers of southern Albania and the Dodecanese. Greek public opinion was also still outraged by France's temporary impounding at Villefranche of the Greek pre-dreadnoughts *Lemnos* and *Kilkis* (just bought from the United States) while the Entente awaited Greece's decision on which side to fight. On 9 August, the German battlecruiser *Goeben* was coaled in the Greek Aegean island of Donoussa with the indispensable Cardiff coal she needed to reach Turkey. On 8 August, however, Austrian Admiral von Haus declined, with Kaiser Franz Joseph's support, Germany's request to send the Austro–Hungarian battlefleet, as the odds were too unfavourable. Only two dreadnoughts (*Viribus Unitis* and *Tegetthoff*), three pre-dreadnoughts and the scout *Admiral Spaun* were available, as the brand new dreadnought *Prinz Eugen* had only just been completed on 17 July 1914 and her crew was untrained. This was also true for the scout *Saïda*, commissioned on 1 August. The k.u.k. Kriegsmarine's main aim, therefore, was to defend the Empire's coastline using local minefields, coastal batteries and its own small submarines. On 12 August, Berlin replied, asking for three Radetzkys to be sent to Constantinople, but there was nothing to be done. The window of opportunity for a clear passage for the Austro–Hungarian warships facing Italy was ending. On the other side, London and Paris tried to avoid a declaration of war against Vienna hoping, in vain, to be able to separate the Habsburgs from Germany. Since the 1860s, the UK had been Austria–Hungary's main lender within the banking system – a conflict with Vienna was against British interests. After a curious diplomatic minuet on 10, 11 and 12 August, Britain and France half-heartedly declared war on Austria–Hungary on 13 August.

THE ADRIATIC CURTAIN RISES

On 16 August 1914, the French fleet (dreadnoughts *Courbet* and *Jean Bart* with ten pre-dreadnoughts and four armoured cruisers) sank the old Austro–Hungarian protected cruiser *Zenta* which had been blockading the port of Antivari in Montenegro in the Adriatic. According to the future admiral Andrew Browne Cunningham, it was quite a wild affair. The French pre-dreadnoughts *Condorcet* and *Justice* were damaged by explosions from three guns of their own and, the day after, *Justice* and her sister *Démocratie* collided.

The Italian Navy never doubted its ability to defeat the k.u.k. Kriegsmarine if it sortied from Pola. From Cattaro the problem was to intercept the


British
French
Italian
5° W
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5° E
10° E
15° E
20° E
25° E
30° E
35° E
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TUNISIA
TRIPOLI
ITALY
AUSTRIA
ASIA MINOR
SYRIA
EGYPT
Genoa
Pola
Marseille
Corsica
Sardina
Naples
Cattaro
Salonika
C. Kephali
Corfu
Sicily
C. Spartivento
Pantellaria
C. Passero
Malta
Lampedusa
Gibraltar
Oran
C. Palos
Crete
Rhodes
Alexandria
Port Said
El Arish
I. Br.
II. Fr.
III. It.
IV. It.
IV. Fr.
V. Br.
VII. Fr.
VIII. Br.
IX. Fr.
X. Br.
XI It.
N
0
200 miles
0
200km

Austro–Hungarian cruiser squadron in time, but the sea lanes with Albania were never compromised (1,180 voyages by merchant vessels in 1915–18; 13 steamers sunk by enemy action: two by surface warships, two by mines, nine by submarines) and 736,403 men, 163,320 horses and mules, 485 guns and 580,566 tons of materiel arrived safely in both directions.

The real problem was the defence of sea lanes against the German submarines from 1916. During World War I, Italy imported 49 million tons from the Strait of Gibraltar and 2 million (mostly Australian grain in 1917–18) from Suez. Imports were: 16,268 million tons in 1915; 15,371 in 1916; 10,720 in 1917 and 10,610 in 1918.

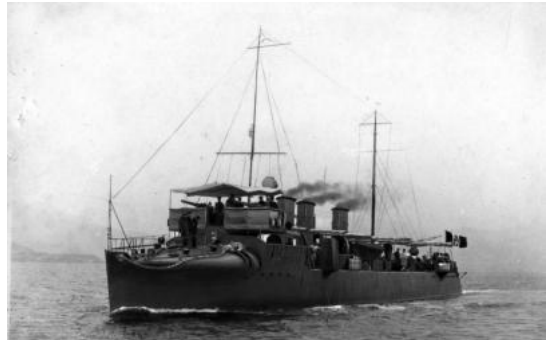
The import crisis of August 1917, a large and bloody riot in Turin and around the country, was caused by the diversion, made at the end of October 1916, by the British, from the Mediterranean route to the Cape route to avoid the German U-boat threat. It was only partially counteracted by British coal then being sent to Italy by rail from the French Channel harbours (0.5 million tons in 1917 and 3.1 the next year). Tonnage was a key issue. Italian losses had been slight in 1915 (39,459 GWT), but in 1916 rose to 206,305 and, in 1917, totalled 358,296. As it was impossible to increase Allied assistance, the defence of the Italian merchant fleet became key to the success of the war. The RM thus introduced its own convoys in the Western Mediterranean in February 1917 (the Allies in May), using an eclectic force of a dozen warships (old destroyers, torpedo cruisers and auxiliary cruisers) to protect the high seas traffic along the important Gibraltar–Genoa route. It also employed MAS boats, auxiliary gunboats, minesweepers, aircraft, blimps and old shore battery guns etc. for coastal convoys. The losses of this mosquito fleet were: 1,020 tons in 1915; 13,329 tons in 1916; 22,658 tons in 1917 and 10,144 tons in 1918.

In 1915, in addition to high sea steamers, Italy had 614,000 GWT (Gross Weight Tons) of coasters whose size was less than 100 tons, most of them sailing ships. These ships were wooden (not a strategic material which had to be imported like coal or steel) and new construction totalled about 70,000 tons to replace them. The materiel lost en route was less than 1 per cent of the loads, but the casualty list was heavy.

Trade protection was directed from 2 February 1917 by the Central Command in Rome, the *Ispettorato per la difesa del traffico*, led by Adm Giuseppe Mortola. It was the core of the future 1940–43 Supermarina – the RM Central Command. At the beginning of 1918, the total Italian tonnage available was on a tightrope and did not allow for any further heavy losses. Italian merchant vessels lost in 1918 totalled 165,390. By May 1918, the damage done by German submarines was lessening and losses decreased. The Central Powers lost 18 submarines in the Mediterranean, seven of them sunk by Italian warships.

In 1904, the Royal Navy had had 12 pre-dreadnoughts based at Malta, but by 1914 the German menace in the North Sea had forced the Mediterranean Fleet to be reduced to just three battlecruisers, four armoured cruisers and

four light cruisers. From mid-August 1914, these were patrolling off the Dardanelles. The Marine Nationale used the distant Malta as its main base and Navarino Bay in Greece[3] from September 1914 to coal and get supplies for the armoured cruisers patrolling the Strait of Otranto. The stalemate with Austria–Hungary (who did not deploy any ships into the area) went on until the Italian declaration of war. The k.u.k. Kriegsmarine then damaged the French dreadnought *Jean Bart* on 21 December 1914 with a torpedo fired from the submarine U 12, and sank the French armoured cruiser *Gambetta* (U 5) on 27 April 1915.



The destroyer *Garibaldino*. The first generation (about 400 tons) of Italian destroyers was used mainly in the Northern Adriatic and, from 1916, as convoy escort vessels in the Western Mediterranean along the Gibraltar–Genoa route. *Garibaldino* was sunk by the destroyer HMS *Cygnet* which rammed her on 16 July 1918 off Villefranche.

Meanwhile, Austro–Hungarian troops were suffering defeats at the hands of Serbia (19 August 1914). Russia's initial invasion of East Prussia and Southern Galicia, and the battle of the Marne induced Germany to offer Italy, on 9 September 1914, Nice, Upper and Lower Savoy, Corsica, Tunisia and Malta if it would declare war against the Entente. 'Too late' was the Italian government's answer. All that Italy could consider, Rome informed them in December 1914, was neutrality, in exchange for the immediate transfer of Trentino and a slice of further territories including some Dalmatian islands and Trieste; the latter possibly with an international status. Vienna refused, despite German appeals, including the restoration of the Silesian territories conquered by Frederick the Great in 1741. To induce Vienna to accept, the German government even floated the idea to restore, after the war, the generous territorial concessions made previously to Italy. But it was all useless. Austria–Hungary, under the elderly Kaiser Franz Joseph I, could not accept for understandable political reasons. Italy's needs were drawing it towards the Entente – the Anglo–French naval blockade had caused the closure, by April 1915, of a quarter of Italian factories due to lack of coal and raw materials. Before the war, Italy imported 11 million tons of anthracite yearly, 90 per cent from Britain. It also imported one-fifth of its food. Rome could not afford a further tightening of the ring by the Entente which would restrict its maritime commerce.

After the very publicized appearance of some Austro–Hungarian heavy artillery batteries along the Western Front between August 1914 and May 1915 and, again, at Verdun in 1916, it was the threat, caused by the activation of about ten new Austro–Hungarian army divisions (with German help) during winter 1914–15, which induced the Entente to conclude the Treaty of London with Italy. It was signed on 26 April 1915 after tough negotiations, and promised Italy large dividends at Vienna's expense. The Italian Army's 40 divisions (increased from the original 28 in August 1914) would help avoid a possible collapse of the precarious military balance in Western Europe, and prevent Austria–Hungary sending its forces to the Western Front in strength. This was a worry which lasted until 1918, when

3 Foreign Minister Streit resigned, for real this time, on 18 August 1914 and the Allies immediately afterwards let the battleships *Kilkis* and *Lemons* sail, one at a time, for Piraeus.

A towed target hit by the pre-dreadnought battleship *Benedetto Brin*. Italian gunfire doctrine was, like the French and Austro–Hungarian one, outdated compared to the British, German and US Navies. During the war, however, short-range actions in the Adriatic (based on precision shooting and rapid fire), many of them brief night skirmishes fought using searchlights, confirmed the capability of the guns on both sides.

both Italy and Austria–Hungary sent troops.[4] With the situation on the Western Front precarious and with too few troops and shell shortages, London and Paris also sought Russia's help to apply pressure on the Eastern Front. On 10 April 1915, they overturned a century of Anglo–French policy in the Black Sea, and recognized Russia's future control of Constantinople and the Straits. For the record, the new republican government of Russia led by Prince Lvov, faced in March 1917 with the threat of no longer receiving any Allied supplies, gave these Franco–British secret promises up.

If the new Italian foreign minister, Sidney Sonnino (who succeeded San Giuliano after his death, on 16 October 1914), was a tough nut to crack, Admiral Thaon di Revel was worse. Under his leadership, Italy took command of the Adriatic theatre of war despite the fact that since July 1912, for the Entente, the Mediterranean had been a French prerogative and de facto dominated by the British. The Allies, however, did mislead the RM over the Naval Convention signed on 10 May 1915. The Italian Navy believed that the Royal Navy would send its two most recent Lord Nelson-class pre-dreadnoughts and two King Edward VIIs to Taranto, to support the battlefleet. Instead, what arrived were *Queen*, *London*, *Implacable* and *Prince of Wales* – old, much too slow (less than 18 knots) and defective. These remained idle until October 1916 and February 1917, when they were sent home to go into reserve, except for *Queen*, which was used as a depot ship for the British crews of the drifters and trawlers of the Otranto Barrage.

The real British contribution was the constant presence at Brindisi, until the end of the war, of at least a pair of light cruisers. The Italians appreciated their usefulness, asking Britain periodically if they could buy – in gold – two such cruisers, new or second-hand, but these proposals were declined as British political presence in the Adriatic would have been jeopardized by the purchase. Italy also asked the United States, in 1918, if they could buy a pair of the future Omaha-class light cruisers, but the war was over before they were laid down.

France contributed with a flotilla of destroyers plagued by machinery defects and (again) exploding guns. After a long war, they were retired during spring 1918 because the French battlefleet (which had remained inactive after the Italian declaration of war, first at Malta and, from January 1916, at Corfu) lacked the necessary escort force after almost four years of ships being lost and worn out. The absence of Marine Nationale fleet warships in the Adriatic in November 1918 compromised France's hardliners towards Italy. This minority within the Paris government sought unopposed French power in the Balkans post-war, rather than accepting any Italian influence.

4 Four Austro–Hungarian divisions were sent to Lorraine between July and September 1918, where they faced American and French troops, two Italian ones having previously been sent to France in April 1918.

FLEET FIGHTING POWER

On 24 May 1915, the Italian battlefleet (commanded by Admiral Luigi di Savoia Duca degli Abruzzi since 30 August 1914), now named *Forze Navali riunite*, traditionally known as *L'Armata*, was formed by:

- I Divisione (battleships *Cavour* (flagship), *Dante Alighieri*, *Cesare*, *Leonardo da Vinci*)
- II Divisione (battleships *Vittorio Emanuele*, *Regina Elena*, *Roma*, *Napoli*)
- III Divisione (battleships *Benedetto Brin*, *Regina Margherita*, Scout *Quarto*, *Bixio*, *Marsala*)
- IV Divisione (armoured cruisers *Pisa*, *Amalfi*, *San Giorgio*, *San Marco*)
- V Divisione (armoured cruisers *Garibaldi*, *Ferruccio Ferrucci*, *Varese*)

The force was based between Taranto, Brindisi and Valona, and also included 13 destroyers, 28 torpedo boats and seven submarines. One old armoured cruiser (*Vittor Pisani*), four protected cruisers, one torpedo cruiser and three auxiliary cruisers had patrolling or auxiliary tasks. A further protected cruiser, *Elba*, served as a seaplane depot ship with three Curtiss 80hp V8 flying boats.

The *Divisione Navale Speciale* (under Admiral Enrico Millo) was stationed in the Northern Adriatic, at Venice, and was formed using the elderly battleships *Emanuele Filiberto* and *Saint Bon*, with the older battleship *Dandolo* used as a self-propelled floating battery to improve local coastal defences. The elderly battleship *Sardegna* and the venerable armoured cruisers *Marco Polo* and *Carlo Alberto* were used as a flank force. In addition, there were 11 destroyers, 28 torpedo boats and 14 submarines.

At the northern point of the Adriatic, the front line between the Italian Terza Armata and the Austro–Hungarian Isonzo Armée was within range of the sea. The Italian Army lacked heavy artillery and, as the Northern Adriatic's shallow seabed lay just offshore (between Venice and Grado, an almost continuous lagoon),

An Albatros Aviatik floatplane in Venice, December 1915. In May 1915, the Italian Navy Air Branch had a total of 58 aircraft, compared to 98 Austro–Hungarian. The French addition of 16 floatplanes was welcome. The pilot here is SubLt Silvio Montanarella, a famous Africa explorer. In 1935, he made a cruise along the Nile to study the logistics of a potential invasion of Egypt from Eritrea through Sudan. Agatha Christie made him a character in her novel *Death on the Nile* (Italian archaeologist Guido Richetti, actually a spy).

Admiral Thaon di Revel decided during spring 1915 not to use the old capital ships to support the Italian Army, but rather self-propelled (or towed) unarmoured pontoons, slow (about three knots), armed with guns from old warships and supported by tugboats and motor barges. The first was the *Pavia*, a Po river steamer fitted with two 6in guns from the old protected cruiser *Bausan* and used off Grado (taken on 28 May) on 4 June 1915. On 14 June, Austria–Hungary reacted, firing from gun emplacements at Duino, which damaged the auxiliary steamer *Timavo*. Three days later a long duel between four pontoons and six batteries caused the loss of one pontoon, later recovered, and the large explosion of an Austro–Hungarian munitions depot. One of the commanders of the batteries was the young Lt Giuseppe Fioravanzo, the future 'brain' of the Italian Navy.

The artillery pontoons proved so effective that the RM armed 80 of them between 1915 and 1918 on the Isonzo and, later, Piave front line. They were flanked by a dozen Navy-manned field batteries (*33° Raggruppamento*) – some of them with 3in and 4in portée guns on FIAT trucks. The pontoons of this Inshore Squadron sailed, or were towed, at night and camouflaged among the reeds before firing the next day, then moved again at night. It was a hard life that only sailors, fishermen from the River Po, and sturdy officers and NCOs could endure, with the areas plagued by mosquitoes, fevers and mud. The only Austro–Hungarian response was using aircraft and counter-battery fire; there was no attempt to enter the area with similar combat barges.

Thus RM guns tormented the Imperial Army almost every day, for four years. Imperial Army generals often complained to the k.u.k. Kriegsmarine about the casualties and the effects on the spirits of their troops. Periodically these pontoons fought main actions, such as on 24 October 1915 off Medeazza and Flondar. While supporting an Italian attack, the pontoons fired 250 shells and received 110, damaging one of them. In another exchange, on 28 October, the Italians fired 113 rounds for 28 Austro–Hungarian ones. On 4 November, 150 rounds were fired against an Austro–Hungarian tugboat towing an unarmed pontoon off Duino, for 57 rounds in return. The small convoy retreated and the damaged pontoon sank off Sistiana.

SHIPS AND WEAPONS

Italian boat designs were traditionally sound and often original. Machinery too was reliable, one exception being the over-complicated turbines and boilers of the two Bixio-class scouts, whose main armament though was positioned in a more logical way to the *Quarto*. Their Italian-made Curtiss turbines, however, often

suffered from mechanical troubles. Speed was considered a must and even a gas turbine of the French Armengaud-Lemale type had been studied and tested in a laboratory at Spezia in 1912–13 to see if it could be used.

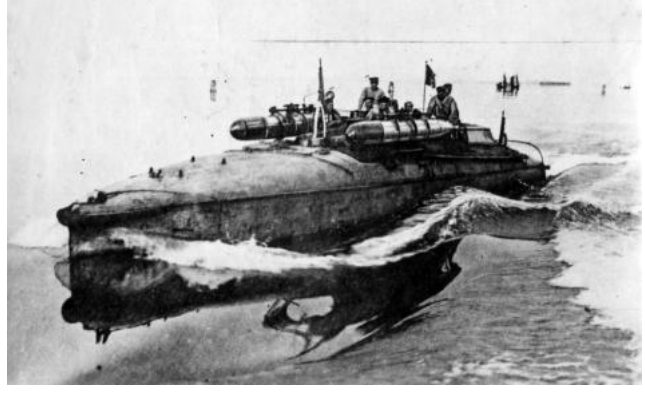
When the European war began, Admiral Thaon di Revel decided to only use designs that were well tested: for example, the *Tre pipe* (three-stacked) destroyers of the Indomito class, designed in 1909; the PN-class torpedo boats, and the Medusa-class submarines, all slightly improved. Italian resources were limited by the import bottlenecks, and numerical strength was essential. The RM Commander-in-Chief believed in innovation and supported, in October 1914, a private venture proposal by the S.V.A.N. enterprise of Venice for a motor torpedo boat (the future MAS boats). Built in wood and powered by petrol engines, they would have the same punch as a steel 108-ton torpedo boat.

An Italian Navy 6in gun emplacement similar to the Cortellazzo battery one.

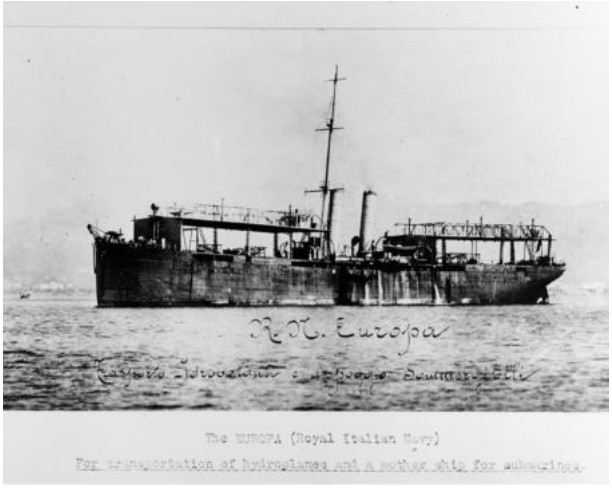
The battleships *Duilio* and *Doria* were well advanced and were commissioned, respectively on 10 May 1915 and 13 March 1916 (at the sea trials of the latter, the resulting numbers were too even, i.e. '…,000', suggesting hasty testing). Production of the Caracciolo class battleships was, instead, stopped on 31 March 1916 because destroyers, torpedo boats, submarines, merchant vessels and the fitting-out of the new auxiliary escort ships (former tugboats and motor fishing vessels bought worldwide, from the Low Countries to Japan) had priority.

Favouring novelty, Thaon di Revel asked for a seaplane carrier in 1914. A former tramp steamer, *Europa*, was put into service the next year as a depot ship with ten flying boats. Too slow to sail with the battlefleet, she was based at Valona with the remainder of the RM logistics train (the repair vessel *Vulcano*, the cable ship *Città di Milano*, tankers, etc.). Di Revel greatly supported the Italian Navy air branch, which, under his authority, expanded from 30 aircraft in 1915 to 638 flying boats, floatplanes and wheeled aircraft in service on 1 November 1918. Airship strength increased from two to four (with a further 18 blimps).

A MAS boat in 1916. In their attack version, this new fast coastal force needed the best commanders (officers and NCOs) and crews available. In total, there were never more than two dozen of these boats commissioned for anti-shipping and the task of forcing harbours. The remainder (about 200 boats) were used in less glamorous, but decisive ASW duties along the Italian coasts.



Midget submarines (with defensive roles only, due to limited range) 'A' and 'B' classes were commissioned, but by 1918 they proved unsatisfactory and were decommissioned. A hydrofoil armed with a torpedo was tested at Venice in 1917. The idea was to use it to force the enemy bases, skimming over the defensive booms, but she was deemed unseaworthy.



The seaplane carrier *Europa*. Commissioned on 6 October 1915, she usually carried three reconnaissance aircraft and two fighters. As she was slow (12 knots), she served as a depot vessel at Valona both for aircraft and submarines. She was paid off in 1920 and replaced by the *Giuseppe Miraglia* seaplane carrier in 1927. (NHHC)

Naval artillery, based on British and French models until 1912, had been built in Italy for decades and demonstrated itself to be sound and effective, as were propellants, charges, fuses and shells. Torpedoes, however, were a missed opportunity. They too were made in Italy, but poor maintenance caused them to fail to explode too often as they fused; a failure which spared one dreadnought (*Prinz Eugen*, fired at on 10 June 1918), two destroyers, two torpedo boats, three submarines and five auxiliary vessels and freighters. Just after the war, their whole training system was revolutionized and improved.

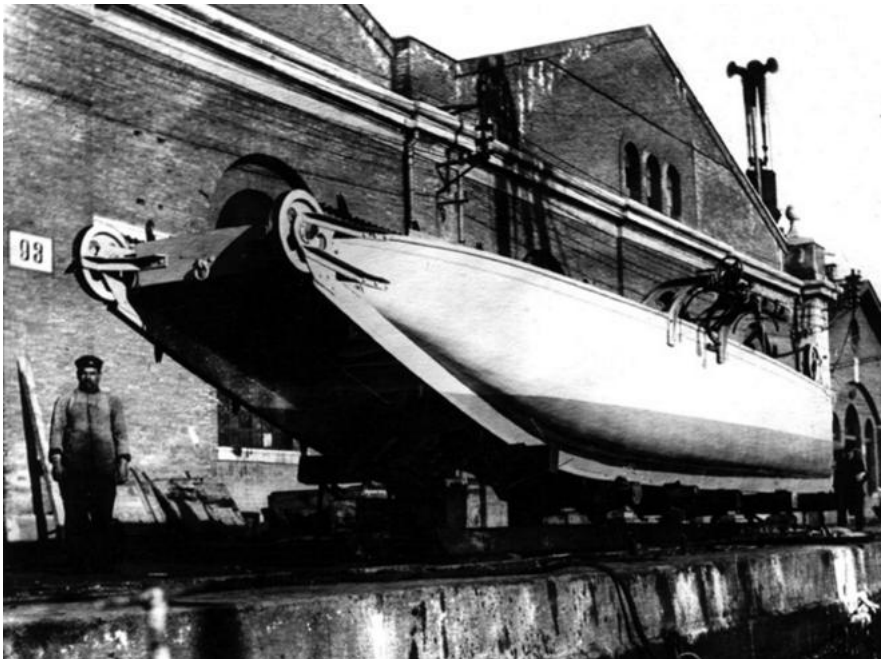
Antisubmarine warfare (ASW) weapons, a novelty everywhere, were introduced in 1915, from towed torpedoes to depth charges. The number of AA weapons, MGs and 3in guns on board ships was increased throughout the war. As the main German submarine base was Cattaro, whose deep water was beyond the classic mine depth, RM officer Count Elia invented a new type of mooring wire, the type Italia, and the necessary shell, to anchor the weapons as deep as 547 fathoms. They were ready after the war and a new class of coastal minelayers, the Fasanas, were built to lay them. Drifting mines were used in 1917–18; their only known success, however, was the damage sustained by the Austro–Hungarian auxiliary vessel *Bussard* on 2 August 1918.

TARGET POLA

Attack craft were also favoured. Di Revel was a believer in the *Battaglia in porto* – attacking the enemy inside his own base. On 24 February 1912, commanding an armoured cruiser squadron off Beirut, he had ordered a slow steam picket boat from the cruiser *Garibaldi*, armed with torpedoes, to penetrate the harbour in daylight while his two cruisers were distracting Turkish attention. The boat was able to sink the armoured ship *Avni Illah*, an ironclad reconstructed in Italy in 1903–06, which was moored among some neutral steamers to avoid any danger of a bombardment.

First generation (i.e. small and expendable) destroyers and torpedo boats were the ideal ships for this task, while submarines, in spite of the plans that all navies had made for this role before the war, were not. The loss of the French boat *Curie*, trapped on 20 December 1914 in the net barrage of Pola to become the Austro–Hungarian U 14, had confirmed this.

The MAS motor boats were originally intended to perform this type of harbour-forcing mission. From 1915, new attack craft were also conceived, including the Grillo-type *barchini saltatori* (jumping boats), intended to



The climbing boat *Grillo* in the Venice shipyard (*Arsenale*), 1918. She was developed in 1915 and provided with two lateral caterpillar chains for climbing over the harbour nets. On 9–10, 12–13 April, 9–10 May and 11–12 May 1918, four attempts to force Pola were made, without success due to delays, bad weather etc. The fifth endeavour was made on the night of 13–14 May. The *Grillo* stopped at the last barrage and self-destructed. The wreck was recovered by the Austro–Hungarian Navy who tried to copy her. A prototype was under construction in Austria at the end of the war.

climb over harbour booms using their caterpillar tracks; the semi-submersible self-propelled mine nicknamed *Mignatta*; and a desperate system of using frogmen with a limited air reserve to cut harbour nets and guide submarines through, conceived by Lt Angelo Belloni, the father of World War II frogmen.

Further projects were envisaged whose purpose was to make Austria–Hungary's only main naval base, Pola, untenable, thus crippling k.u.k. Kriegsmarine efficiency. Facilities at Fiume were, at best, minimal while Zara, Spalato, Sebenico, Cattaro and Ragusa, not to mention Durazzo since 1916, had no arsenal or yards. The first idea, proposed by the Ansaldo Factory, was to make a battery of *cannonissimi*, a railway gun designed in late 1916 by modifying the 15in guns of the Caracciolos into a 210mm (11.1in) weapon (similar to the Paris Gun which would be used by the Germans in 1918). It proved immediately to be beyond the capabilities of Italian technology.[5] The second plan, advanced in 1917, was to bomb Pola using flying bombs propelled by a pulse-jet, an engine whose idea had been conceived in 1906 and just patented by the Spanish inventor Ramón Casanova. It was a weapon similar to the V-1, but whose metallurgic technology would not be actually feasible before the late 1930s. In 1918, the RM conceived the Crocco–Guidoni *Telebomba*, a stand-off gyroscope-controlled biplane bomb. It was eventually tested by the RM on 13 June 1925 using an airship, but with no success.

5 In 1935 the test failure of the gun, which had just been completed by the Army and which was supposed to shell the Grand Harbour of Malta from Capo Passero, in Sicily, confirmed people's doubts.

HOW THE FLEET OPERATED

COMMAND

The new commander of the Italian battlefleet was the Duke of Abruzzi, a cousin of the king. An excellent sailor and a famous explorer in Africa and the Arctic, he was both a true believer in the 'great-decisive-naval-battle' and a supporter of the old principle that the fleet's commander was the real guide of the navy. However, the role of Chief-of-Staff of the RM, created in 1889 as a merely administrative role, had progressively become more powerful since the early 1900s. When Thaon di Revel took over the role in April 1913, he intended to be the true leader of the Italian Navy. Problems between the two men were complicated by the fact that Thaon di Revel was a strenuous supporter of the calculated risk doctrine and of individual initiative while the Duke was eager for a general decisive action and unwilling to delegate to his subordinates.

Perhaps the most insidious enemy of the RM was the Italian political class: educated by two generations of intellectuals who disparaged Italian leadership and fighting ability (amongst other things), and answering to a population lacking interest or knowledge in naval matters, the Navy had always been more politically isolated and less favoured than the Army, a condition good for naval selection, training, tradition and *esprit de corps*, but one which limited its political audience. On 4 July 1915, Thaon di Revel wrote a curt letter to the Prime Minister after he had complained openly about the loss of the Italian torpedo boat 17OS during a minelaying operation in the northern Adriatic. The Chief-of-Staff was direct about requesting that the Navy be left to work in peace. This letter was so harsh that it was not included in the Prime Minister's official cabinet correspondence and a copy was only discovered in 2022 in Navy archives. The RM required resolute leadership and stamina by all ranks to enable it to bypass the mire of Italian politics.

COMMUNICATIONS AND INTELLIGENCE

Naval communications by wireless were efficient from the beginning of the war. Radio sets were too cumbersome for torpedo boats, submarines and MAS boats, and most vessels depended on carrier pigeons from ship to land (but not vice versa) until the end of the war.

Versailles, 1919. Admiral Paolo Thaon di Revel (left) and his aide-de-camp, Prince LtCdr Manfredi Gravina. The Admiral was a descendant of an Irishman, Admiral de France, who in 1345 led a fleet of ships into the Channel during the Hundred Years War. Prince Gravina was an ace of Italian Navy Intelligence between 1910 and 1915. In 1920, he was the first to inform Rome about an unknown rabble-rouser, Adolf Hitler, predicting his success. He was appointed High Commissioner of Danzig and died in 1932.

Sigint

Conventional histories state that the Habsburg Navy had an efficient SIGINT branch, both in radio direction finding (RDF) and decrypting, while the RM used RDF only for most of the war with some positive results against German submarines in the Mediterranean. In actual fact, Italian codebreakers were relatively inactive because agents delivered the k.u.k. Kriegsmarine's ciphers and codes on a regular basis. It was thus not a decrypting, but merely a deciphering activity, except when the tables of superencipherment of the month were not available.[6] This bonanza stopped at the beginning of the war and, in 1916, a new RM codebreaking section was instituted in Venice, led by LtCdr Prince Manfredi Gravina and instructed by Italian Army codebreakers. In 1917, Cdr Nigel de Grey (Royal Navy) paid a visit to Italy in order to improve the knowledge of German and Austro–Hungarian cryptology. By 1918, the RM's successes in this field were appreciable (it must be remembered that, unlike the Germans, the k.u.k. Kriegsmarine used very little wireless, preferring to rely on secure communications by cable throughout the coast and the Dalmatian Islands).

Captured ciphers, maps and handbooks on the Austrian–Hungary submarine U 12 and the German UC 12 paid dividends during the harbour-forcing operations of 1917–18.

Humint

In the 1910s, Austria–Hungary activated a wave of espionage agents in Italy. This large net was compromised on 31 August 1911, when the yacht *Rovenska*, flying the ensign of the future Emperor Charles I collided with an Italian torpedo boat and was boarded by the commander of the Italian warship, Manfredi Gravina. It was not the first time the yacht had been conducting a clandestine survey and charting of the new passages through the lagoon of Venice. But, in fact, this time, this particular incident had been staged by the Italians to identify two people on board. They were later tailed without being seen, and the operation

6 Copies of the original Austro–Hungarian Navy ciphers before 1915 are exhibited in the classified Italian Intelligence Centre Museum outside Rome.

Venice, 1916. Lt Manfredi Gravina, on the left, attending a lesson of cryptology by Italian Army codebreakers. It was the first step for the modern Italian Navy SIGINT branch.

resulted in a total of 147 agents being identified, most of whom were neutralized and some turned.

In 1914, Austro–Hungarian Intelligence, the *Evidenzbureau*, armed anarchists in Italy (the police spent the next 15 years recovering the weapons, now in the Museo Criminologico in Rome) and tried to infiltrate groups. Counter-espionage by the RM and police culminated in the successful insertion, in 1915, of undercover agents into Vienna's main spy network in Switzerland. In the later Zurich Coup (*Colpo di Zurigo*), during Carnival on the night of 28 February 1917, a party of sailors and petty criminals led by LtCdr Pompeo Aloisi (later Mussolini's personal secretary for Foreign Affairs in 1932–36) opened the safe of the Austro–Hungarian Consul and spymaster. The papers stolen revealed a large network of informers, including members of Parliament. The forced removal in January 1917 of neutral and enemy representatives from the Holy See, put an end to Germany's main parallel spy network.

Unfortunately, the coup worked too well, as it also threatened to compromise Italy's double-agents. It was thus necessary to circulate, by way of a leak to the press, the sinking of the old protected cruiser *Etruria*, on 13 August 1918, at Livorno. It was said to be due to successful sabotage by Viennese spies. In reality, *Etruria* was sunk in an accident caused by the crew of the destroyer HMS *Archer*, then refitting in the Odero yard, who were ferrying ammunition on a barge (after the war, Britain paid Italy the value of the cruiser). Austria–Hungary also made

The Italian torpedo boat 52AS. These all-round warships acted as patrols, escorts, minelayers, minesweepers and much else. The Italian Navy favoured a 150-ton type ('PN' class). Austria–Hungary preferred a 250-ton model. From the early 20th century, this type of small warship (less than 300 tons) was built only by navies operating in confined waters like Italy, Austria–Hungary, Denmark, Sweden and Thailand.

similar claims of having sabotaged the pre-dreadnought *Benedetto Brin* at Brindisi on 27 September 1915, and the dreadnought *Leonardo da Vinci* at Taranto on 2 August 1916. These were, however, mere false pretences by the *Evidenzbureau*. Both these warships blew up due to faulty ammunition. Two of the 12in guns from the *Brin* were recovered and mounted on the self-propelled pontoons *Valente* and *Monfalcone* flanking the Army near the mouth of the Isonzo River.

In 1916, RM intelligence reactivated a network in the ranks of the k.u.k. Kriegsmarine which made use of a few Italian-speaking officers, including the commander of a torpedo boat. Their information, inevitably delivered late, was picked up at night by flying boats along the Istrian coasts. After the war, a handful (not more than 30) of former Austro–Hungarian officers served in the Italian Navy, most in the reserve. From among these, in 1935, the British intelligence station in Vienna recruited some informers. They were discovered and tried in 1938 with one of them being shot at Forte Bravetta on 6 March 1939. Undercover agents from the RM intelligence in Austria remained operational within the *Abwehr* (the German intelligence agency) until the Italian armistice was announced on 8 September 1943. The next day the relevant papers were hidden, and only recovered in June 2016.

LOGISTICS AND ECONOMICS

The Italian Navy battlefleet based its pre-dreadnoughts and armoured cruisers at Brindisi and Valona and its dreadnoughts at Taranto, 250 miles from the Brindisi–Valona line. The Austro–Hungarian base at Cattaro (now Kotor, Montenegro) was only 120 miles from Brindisi. As long as the Austro–Hungarian battlefleet was at Pola (300 miles away), this Italian and Allied deployment only had to react to swift Austro–Hungarian night sorties from Cattaro, where the k.u.k. Kriegsmarine had its scout force (two armoured cruisers and three Helgoland-class scout cruisers), to control the Otranto Barrage. However, it was also necessary to monitor and patrol the western coast of Istria day and night, in the Northern Adriatic, so that an enemy squadron couldn't disappear behind the Dalmatian archipelago and minefields couldn't appear suddenly and undetected, the next day, in the Otranto Strait. Such a task increased wear and tear for Italian crews and ships, and allowed the Austro–Hungarians the advantage of surprise.

Both navies used coal. The RM imported theirs from Britain, but the supply was curtailed in 1917–18 as a consequence of the German submarine war (the range of the small Austro–Hungarian boats was short; at most, they could operate in the Ionian Sea and, therefore, their strategic value for the tonnage war was zero).

10 June 1918, off Premuda island (Dalmatia). The sinking of the Austro–Hungarian dreadnought battleship *Szent István*, hit by MAS 15 (LtCdr Luigi Rizzo).

The k.u.k. Kriegsmarine had stocks of good British Cardiff anthracite, but used it sparingly during the war, substituting domestic coal of lower quality, and administrative blunders were made. When the Italians occupied Pola, in November 1918, they found Austria–Hungary still had large amounts of excellent British pre-war coal there, despite the fact that during the June 1918 Otranto raid, the dreadnoughts *Szent István* and *Tegetthoff* had been betrayed by their huge black clouds of funnel smoke, the result of burning poor-quality coal from the Galician mines. Not by chance was there a film about that episode entitled *Fumo all'orizzonte* ('Smoke along the horizon').

Italy had plenty of yards beyond the enemy's reach, from Genoa to Spezia, Livorno, Naples, Castellammare di Stabia, Taranto and Palermo, plus Venice and Ancona which were more vulnerable from the air. The only attacks on these yards during the war were a lone Austro–Hungarian aircraft bombing Spezia on 10 July 1916 with four bombs, and Naples, bombed by the German airship L 59 on 11 March 1918 from 15,750ft: 16 people were killed and 40 wounded, all civilians. In both cases, almost no military or industrial damage was caused. The problem, however, was keeping the Italian yards supplied with the imported, necessary raw materials and coal in spite of the German U-boat campaign in 1917–18.

In May 1915, the Habsburg Empire lost its ultra-modern yards in Monfalcone when the city was captured by Italy, while its Trieste yards were hit periodically by precision bombardments from the sea and the air. Work in Trieste was effectively stopped until November 1917, and, later by the Austro–Hungarian economic crisis.

During World War I, the RM commissioned the battleship *Doria*, nine light scouts, 18 destroyers, 33 torpedo boats, 33 submarines (plus nine midgets) and 244 MAS boats, also two slow protected cruisers (*Campania* and *Basilicata*) for colonial tasks. One destroyer and 14 submarines were bought in the UK and Canada; and seven further submarines were built and sold by Italian yards to Russia, Spain and Portugal. The former Austro–Hungarian torpedo boat Tb11 surrendered on 5 October 1917 and was re-named, under Italian colours, *Francesco Rismondo*, and the German submarine UC 12 was raised and commissioned again as X 1 by the RM.

During the same time, Austria–Hungary put the battleship *Szent István*, the scout *Novara*, four destroyers, 19 torpedo boats and 11 submarines into service. The Fiume/Porto Re yards and Pola could not deliver more vessels, so a further five small submarines were built as kits in Germany and ferried to Pola by rail, to be assembled there, as were two German torpedo boats in 1918. Two further worn-out former German submarines were bought in July 1917.

Over time, the industrial gap between Italy and Austria–Hungary became evident. The table below gives the size of their respective industrial output of weapons, aircraft and engines.

Brindisi, 1918. An Austro–Hungarian Hansa-Brandenburg CC fighter shot down by an Italian Macchi M.5 flying boat and towed to Italy by a Regia Marina torpedo boat. By mid-1916 the Italian and Allied naval air forces had gained superiority over the Adriatic.

PRODUCTION DURING WORLD WAR I		
	Italy	Austria–Hungary
Aircraft	12,021 (plus 11 airships)	4,768
Aircraft engines	23,979	about 4,900
Field guns	more than 16,000	18,442
Machine guns	37,023	37,702
Shells	69.8 million	64.8 million

The Habsburg Empire had been supplied at first by Norwegian and Greek blockade-runners, but this was greatly reduced when Rome declared war, and was completely over by December 1915, after the RM seized 16 steamers and sailing ships clandestinely bound for Dalmatia.

The data in the table suggests Austria–Hungary had a similar output of field guns, machine guns and shells as Italy, but Vienna had to fight along three main fronts: Russia, the Balkans and Italy and, in 1918, shell production had dropped from 2 million per month in 1916 to 1.4 million in 1917, and only 750,000 in 1918. The same was true for cartridges, guns and machine guns. After mid-1916, Austria–Hungary's supply and transport problems were overwhelming and the economy was subject to an almost uninterrupted contraction; in 1918 its production of arms and munitions fell below the monthly average for 1914.

The tonnage war, however, would not cripple the Habsburg Empire, as its vital communications to Albania were secured by coastal steamers and sailing ships (cruising in daylight only to reduce submarine attacks) and protected by the Dalmatian islands minefields. In addition, more than half a million tons of high-seas merchant vessels lay in reserve. But once the 'clear passage' strategy attempted by Berlin in August 1914 had failed, the opportunity to create a continuous coastal route from the Black Sea to Fiume was lost. It would have been an easily defensible route as large-scale troop landings were pretty much impossible here, as Gallipoli confirmed.

In maintaining or losing their sea trade, the stakes for the Habsburg Empire were high. In 1913, Russia exported 10.5 million tons of grain from the Black Sea, and by 1918 there were 120 million people (not considering the occupied territories) in Germany and Austria–Hungary in dire need of nourishment. This was a task the underfunded Eastern European railway network could not handle, but the Austro–Hungarian Merchant Navy, actually immobilized in Dalmatia, would have been able to accomplish if the threat of the Italian battlefleet had not made its passage impossible.

15 May 1915. The light cruiser HMS *Bristol* and the Italian scout *Marsala* returning to Brindisi.

COMBAT AND ANALYSIS

THE FLEET IN COMBAT 1915

Given the nature of the Adriatic naval war, the actions, sub-divided between the northern and the southern theatres, are reported in the following tables, with notes about the general strategic situation.

Northern Adriatic

NORTHERN ADRIATIC 1915			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES ****
24 May	**DD** *Bersagliere*, *Corazziere*	Night	**Grado**
24 May	**DD** *Zeffiro*	Night	**Porto Buso**. Two Austro–Hungarian (A–H) Custom Guards' motor boats sunk
24 May	BB *Teghettoff*, *Viribus Unitis*, *Prinz Eugen*, *Habsburg*, *Árpád*, *Babenberg*, *Erzherzog Charles 1*, *Erzherzog Ferdinand Max*, *Erzherzog Friedrich*; DD *Dinara*, *Reka*, *Csikós*, *Velebit*; TB 50E, 51T, 53T, 54T, 55T, 57T, 58T, 60T, 62T, 63T, 64F, 67F, 69F, 70F, 72F, 74T, 75T, 76T, 77T	Day	**Ancona**. Steamer *Lemnos* sunk, steamers *Barbara*, *Città di Tripoli*, *Concettina*, tug *Filippo* damaged
24 May	BB *Zrínyi*; TB Tb4, Tb7	Day	**Senigallia**, **Porto Recanati**
24 May	BB *Radetzky*; TB Tb56, 73F	Day	**Potenza Picena**, **Termoli**, **Campomarino**
24 May	AC *Sankt Georg*; TB Tb1, Tb2	Day	**Rimini**, **Pesaro**
24 May	Scout *Novara*, DD *Scharfschütze*, TB Tb78T, 78T, 80T, 81T	Day	**Porto Corsini**. *Novara* (1), *Scharfschütze* (1), TB 80T (1) damaged by GE
29 May	**DD** *Bersagliere*, *Lanciere*, *Artigliere*, *Garibaldino*	Day	**Monfalcone yards**
5 Jun	**DD** *Bersagliere*, *Lanciere*, *Corazziere*, *Artigliere*, *Garibaldino*	Day	**Monfalcone**
7 Jun	**DD** *Bersagliere*, *Lanciere*, *Corazziere*, *Artigliere*, *Garibaldino*	Day	**Monfalcone** (second time)

DATE	SHIPS INVOLVED*	DAY OR NIGHT ACTION	TARGETS AND CONSEQUENCES **
10 Jun	**MS** *Timavo*	Day	**Duino**. *Timavo* (1) hit by GE
18 Jun	Scout *Novara*, *Admiral Spaun*, DD *Scharfschütze*	Day	**Tagliamento lighthouse**
18 Jun	AC *Sankt Georg*; TB Tb57, Tb58, Tb63, Tb67	Day	**Rimini**
18 Jun	Shelling Force (SF): DD *Szigetvár*; TB Tb64, Tb69. Escort Force (EF): Scout *Saïda*, *Helgoland*, DD *Velebit*, *Dinara*, *Reka*, TB 74T, 77T, 78T, 80T, 81T	Day	**Colonnelle** steamer *Grazia* sunk as well as two small sailing ships off Rimini
23 Jul	Scout *Saïda*, *Helgoland*; DD *Velebit*, *Reka*, *Dinara*, *Csepel*, *Tátra*, *Balaton*; TB 74T, 78T	Day	**San Benedetto del Tronto, Ortona, Termoli**. *Dinara*, splinter damage from GE
28 Jul	Scout *Admiral Spaun*; DD *Uskoke*	Day	**Fano**
28 Jul	Scout *Novara*; DD *Scharfschütze*	Day	**Ancona**
3 Nov	Three Italian **TBs**	Day Day	Punta Sdobba. A skirmish against some MSs which retired under the protection of the GE
30 Nov	**TB** 13OS, 16OS vs two MSs towing a pontoon	Day	The minesweepers retired under the protection of GE; the pontoon was sunk
7 Dec	**TB** 2PN, 3PN, 4PN, 6PN, 30AS	Day	**Sistiana**

Glossary

A–H Austro–Hungarian
BB Battleship
AC Armoured Cruiser
CL Light Cruiser
PCr Protected Cruiser
LS Light Scout, as large as a Flotilla Leader
DD Destroyer
TB Torpedo Boat
MAS *Motoscafo Anti Sommergibile* (Motor Torpedo Boat)
ACr Auxiliary Cruiser
GB Gunboat
GE Gun Emplacements, coastal batteries
MS Minesweeper
(1) Number of direct hits damaging a warship
*Allied ships in bold
** Place names in bold indicate a bombardment action

After officially retiring from the Triple Alliance on 8 May 1915, Italy declared war on Austria–Hungary on 23 May, but hostilities were only to begin on 24 May. This fair warning allowed the Austro–Hungarian battlefleet to sortie under the cover of night and, at dawn on 24 May, to bombard many little Italian towns, all of them, except Porto Corsini, without coastal batteries. Damage was minimal, the railways were not affected, and the Italian propaganda mill played the 'baby killers' theme popular in Britain, after similar actions in 1914.

The RM also began operations in the Northern Adriatic after midnight on the night of 23–24 May. The Italian Navy was much more active there than the k.u.k. Kriegsmarine, even without the actions of the armed pontoons. The Austro–Hungarian destroyers and torpedo boats opted for a policy of 'sea denial', acting as navigational guides, mostly at night, for their flying boats' raids against Venice (where the tugboat *Ponza* was damaged on 27 May) and Grado, and executing minelaying operations. On 24 June, Adm Abruzzi approved the request of his personal friend, the harsh Rear Adm Umberto Cagni (his companion to the North Pole), to transfer

The newly commissioned submarine *Luigi Galvani* in 1918. In 1913–14, the Italian Navy asked for boats to patrol the Mediterranean. It was the first step in achieving a sort of 'sea denial' capability beyond the Adriatic and the coasts of Provence and Tunisia. Too big for the Adriatic Sea, the 880 tons boats of the Galvani class were used in 1918 for ASW duties in Libya.

the four armoured cruisers of his IV Divisione to Venice. The idea was to exercise sea power in the Northern Adriatic with warships that were more powerful than any enemy scout, and faster than the Austro–Hungarian battleships. For Thaon di Revel this was nonsense, but the Duke had the upper hand. On 7 July, during a sortie, the armoured cruiser *Amalfi* was torpedoed and sunk by the German submarine UB 14 disguised as the Austro–Hungarian U 26.

Thaon di Revel had been proved right, but this did not help him. He was removed from his role as CoS on 11 October 1915, after the Minister of the Navy, Adm Leone Viale (who was at odds with Abruzzi), was replaced on 30 September 1915 by Admiral Camillo Corsi, a good friend of the Duke. However, thanks to the king, Thaon di Revel was given command of the Northern Adriatic Fleet. Both of them were aware that this was the trump card. The Habsburg battlefleet was at Pola, and the Italian light and expendable forces had to maintain effective pressure, keeping the k.u.k. Kriegsmarine unbalanced by harassing it along the whole Adriatic. If it were a bullfight, the Italian light forces were the *picadores* and *banderilleros* weakening the k.u.k. Kriegsmarine main battleforce, while the Italian *Armata* formed by the dreadnoughts based at Taranto was the *matador*, waiting to perform the killing thrust somewhere near the Otranto Strait.

It was a subtle strategy few were able to understand. After a lost season, the IV Divisione came back to the more suitable Southern Adriatic in April 1916. In the meantime, the RM performed the same patrol activities as the enemy, but on a larger scale, providing navigational support to aircraft bombing Pola, Trieste, Parenzo, Fiume and Sebenico. In addition, the RM airships began their campaign, flying a total of 56 sorties, 46 of them in 1918. They were considered by the Austro–Hungarians to be very effective for their payload and, above all, for their silent approach at night. Warships also shelled the enemy front line on occasion, including the day attack at the enemy general headquarters of Sistiana.

On the European Western Front, the fighting was becoming a stalemate, with 40 divisions of the Italian Army against a force of about 20 Habsburg divisions at first (including the *Standschützen* Tyrol and Voralberg volunteers) that increased to 32 by November 1915.

The partnership of Thaon di Revel and the RM with Gen Luigi Cadorna, the so-called *Generalissimo* leading the *Comando Supremo* (the General Staff), was good enough except for the decisive Albanian front. That task the Army considered a burden, and attempted to reduce the Expeditionary Corps employed there. The Navy insisted on the importance of the Otranto Barrage to face the k.u.k. Kriegsmarine's threat to the sea lanes with Greece. Cadorna considered the Thessaloniki bridgehead important and favoured the possible increase of Italian troops there, exactly the opposite of what the RM constantly asked for. In the end the Italian Navy prevailed.

Southern Adriatic

SOUTHERN ADRIATIC 1915			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES****
24 May	Scout *Admiral Spaun*; DD *Wildfang*, *Streiter*, *Uskoke*	Day	**Manfredonia**, **Vieste**, **Barletta**
24 May	The a.m. squadron: Scout *Helgoland*, DD *Csepel*, *Tátra*, *Lika*, *Orjen*	Day	**Tremiti**, **Torre Mileto**
24 May	The a.m. squadron vs **DD** *Turbine*, *Aquilone*	Day	*Turbine* sunk, *Csepel* (1), *Tátra* (1) damaged
24 May	The a.m. squadron vs **PCr** *Libia*, **ACr**. *Città di Siracusa*	Day	*Helgoland* (s) The faster scout (28 knots) outruns the Italian warships (22 knots)
1 Jun	**AC** *Pisa*, *Amalfi*, *San Giorgio*, *San Marco*; **CL** *Dublin*, *Dartmouth*; **Scout** *Quarto*, *Bixio*; **DD** *Animoso*, *Ardito*, *Ardente*, *Audace*, *Nullo*, *Impavido*, *Indomito*, *Insidioso*, *Intrepido*, *Impetuoso*, *Granatiere*, *Irrequieto* and 3 French DDs; **TB** *Centauro*, *Clio*	Day	**Lissa, Curzola**
5 Jun	**AC** *Garibaldi*, *Varese*, *Ferruccio*, *Pisani*; **CL** *Dublin*; **Scout** *Quarto*, *Bixio*; **DD** *Animoso*, *Ardito*, *Ardente*, *Audace*, *Nullo*, *Irrequieto*, *Impavido*, *Indomito*, *Insidioso*, *Intrepido*, *Impetuoso*, *Cdt Rivière*, *Bisson*, *Bouclier*, *Cdt Bory*, *Protet*, *Magon*	Day	**Ragusa Vecchia, Capo Rodoni, Lissa, Lagosta, Meleda, Busi, Donzella, Monte Hum, Maligrado, Punta Promontore, Oste, Glavat, Cazza, Sant'Andrea**
9 Jun	(SF): **AC** *Ferruccio*, *Varese*, **Scout** *Bixio*, **DD** *Nullo*. (EF): **AC** *Garibaldi*, *Pisani*, **CL** *Dublin*, *Scout Quarto*, **DD** *Impavido*, *Indomito*, *Insidioso*, *Impetuoso*, *Intrepido*, *Irrequieto*, *Animoso*, *Ardito*, *Ardente*, *Audace* and three French DDs	Day	**San Giovanni di Medua, Punta Semana, Capo Rodoni (Albania)**. Three Austro–Hungarian sailing ships sunk HMS *Dublin* damaged by Austro-Hungarian submarine U 4

Continued on page 36

SISTIANA, 7 DECEMBER 1915 (overleaf)

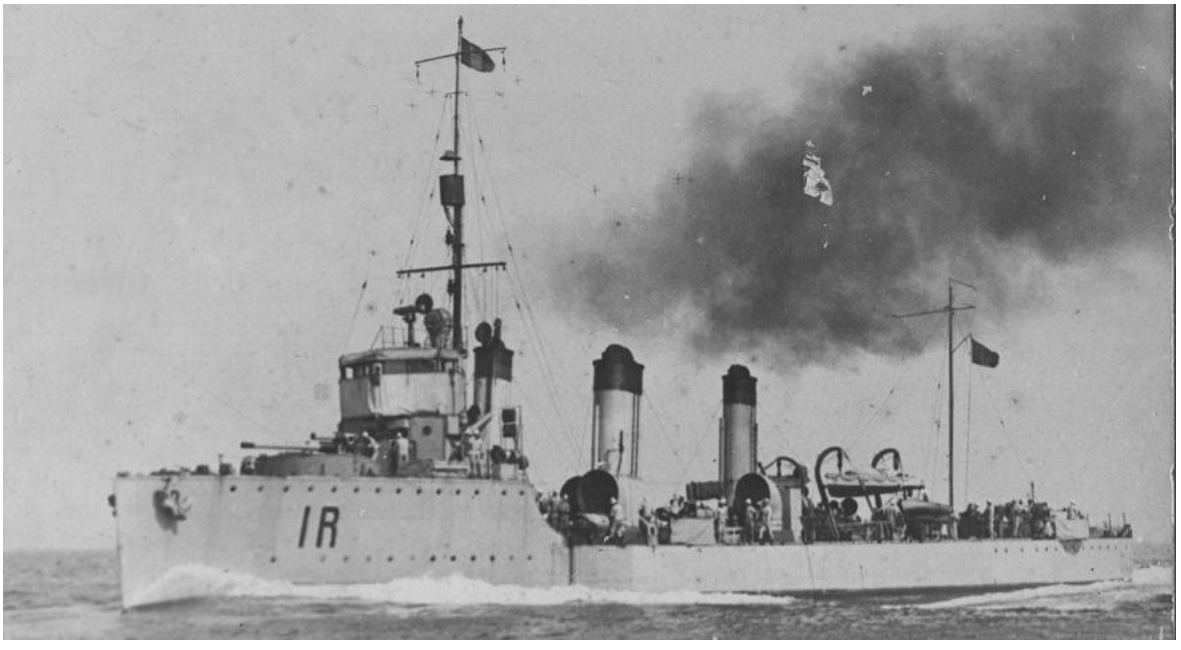
During 1915, Austria–Hungary's air superiority (thanks to the excellent Lohner flying boats) limited Italian Navy's patrols in the Gulf of Trieste. This operation, begun in the early afternoon of 7 December 1915 was, thus, a surprise. Torpedo boats 2PN, 3PN, 4PN, 6PN and 30AS sailed from Grado to shell the Park Hotel at Sistiana before sunset. Two days before, Italian Army intelligence had been informed that a meeting of the High Commands of the Austro–Hungarian *Isonzo Armée* had been scheduled there at 1700hrs. The choice of commanders for the operation from the 10ª Squadriglia (LtCdr Marco Amici Grossi) somewhat reflected the characters of the film *The Dirty Dozen*. Some of the officers had recently been involved in a scuffle with French aviators inside the Hotel Danieli in Venice and the amused Adm Thaon di Revel concluded that they were the right men to tear apart a hotel – this time an enemy one.

The torpedo boats arrived unnoticed before 1715hrs. Austro–Hungarian reports stated that they raised fake k.u.k. Kriegsmarine flags while apparently sailing to Duino, but Italian accounts did not report a *ruse de guerre* such as this. The boats were armed with a single 57mm/43 gun aft, and approached to about 350yds from their target. Simultaneously they manoeuvred silently, backwards, inside the little hotel's marina and motor boat mole then opened fire, sinking, as a bonus, some steam picket boats used for minesweeping duties. After seven minutes of shelling the windows of the building, a 37mm (1.5in) battery carried and manned by Austro–Hungarian sailors, replied together with some rifle shots. One Italian sailor was wounded. The total expenditure used 120 57mm shells. The *Squadriglia* had been piloted inland by a volunteer, Nazario Sauro, a merchant navy officer from Capodistria serving under the Italian colours and whose knowledge of the waters was invaluable After many similar actions, he was captured and hanged by the Austro–Hungarians on 10 August 1916.

DATE	SHIPS INVOLVED*	DAY OR NIGHT ACTION	TARGETS AND CONSEQUENCES**
11 Jul	**AC** *Garibaldi*, *Varese*; **Scout** *Quarto*, *Marsala*; DD *Animoso*, *Ardito*, *Ardente*, *Audace*, *Strale*, *Bisson*, *Bouclier*, *Cdt Rivière*, *Magon*; **ACr** *Città di Palermo*; **TB** *Clio*, *Cassiopea*, *Airone*, *Astore*, *Arpia*, 34PN, 35PN, 36PN, 37PN	Day	**Pelagosa Is., Curzolari Islands**. Italian landing at Pelagosa
13 Jul	DD *Tátra*	Day	**Pelagosa Is.**
18 Jul	**AC** *Garibaldi*, *Varese*, *Ferruccio*, *Pisani*; **Scout** *Quarto*, *Marsala*; **DD** *Intrepido*, *Irrequieto*, *Animoso*, *Ardito*, *Ardente*, *Strale*, *Bisson*, *Bouclier*, *Cdt Rivière*, *Cdt Bory*, *Protet*; **TB** *Alcione*, *Airone*, *Astore*, *Arpia*, *Cigno*, *Clio*, *Calliope*, *Centauro*	Day	**Ragusa, Gravosa, Giuppana**. *Garibaldi* sunk by U 4
28 Jul	Scout *Saïda*, *Helgoland*; DD *Lika*, *Tátra*, *Triglav*, *Balaton* *Csepel*, *Orjen*	Day	Bombardment and failed Austro–Hungarian landing at **Pelagosa**. *Helgoland* (6) by an RM-manned field gun
17 Aug	Scout *Saïda*, *Helgoland*; DD *Lika*, *Orjen*, *Velebit*, *Dinara*	Day	**Pelagosa**
22 Nov	Scout *Helgoland*, *Saïda*; DD *Tátra*, *Balaton*, *Csepel*, *Orjen*, *Lika*, *Triglav*	Night	Steamers *Gallinara* and *Palatino* sunk in the Strait of Otranto
5 Dec	Scout *Novara*; four DDs and three TBs	Day	**Durazzo.** Steamers *Carmelitano* and *Gelsomino* sunk as well as three Albanian small sailing ships
6 Dec	Scout *Helgoland*; DD *Tátra*, *Balaton*, *Csepel*, *Orjen*, *Lika*, *Triglav*	Day	Steamers *Benedetto Giovanni* and *Thira* sunk as well as four Albanian and one Italian little sailing ship and one tugboat off Durazzo
29 Dec	Scout *Helgoland*; DD *Tátra*, *Balaton*, *Csepel*, *Lika*, *Triglav* vs **CL** *Weymouth*, *Dartmouth*; **Scout** *Quarto*, *Bixio*; **DD** *Abba*, *Nievo*, *Mosto*, *Pilo*, *Casque*, *Bisson*, *Renaudin*, *Cdt Bory*, *Cdt Lucas*	Day	**Durazzo.** Steamers *Palatino*, *Unione*, DD *Triglav*, *Lika* sunk; *Helgoland* (5), *Csepel* (1), *Balaton* (splinters), *Bixio* (1) damaged
*Allied ships in bold ** Place names in bold indicate a bombardment action			

In the Southern Adriatic, the Austro–Hungarian bombardments from the sea followed the same rule as before: defenceless little fishery towns of no military interest. Moreover, the small 3.9in shells of the scouts and modern destroyers had very little effect during these hit-and-run bombardments. The Italian battlefleet and the British and French warships replied with similar results of no military value along the Dalmatian coast and islands. The price for this 'do something for the sake of making noise' was the torpedoing by submarines of the British light cruiser HMS *Dublin*, damaged on 9 June, and the loss of the Italian armoured cruiser *Garibaldi* on 18 July. It was a bad exchange.

Equally unproductive, except for propaganda opportunities, was an Italian landing operation at Pelagosa, a barren island in the middle of the Adriatic with almost no water. The RM planted a lookout station and a 3in field battery on it, and a series of Austro–Hungarian bombardments began. A counter-landing was attempted by the k.u.k. Kriegsmarine, but it was repulsed by the little Italian garrison led by a young lieutenant, the future Adm Alberto Da Zara. Some days later, the island was abandoned by both adversaries.



The *Irrequieto*, a second-generation destroyer of 670 tons. Thaon di Revel, opting for expanding the existing numbers of vessels rather than commissioning new projects, ordered 42 of them, 36 of which were commissioned in 1913–22. Their main armament changed from a single and much too heavy 4.7in bow chaser and four 3in guns, to four 3in, then six 4in guns and, in the last series, three 4in guns. Their 450mm (17.7in) torpedoes were inferior to the Austro–Hungarian 533mm (21in) weapons, which were adopted after the war by the RM.

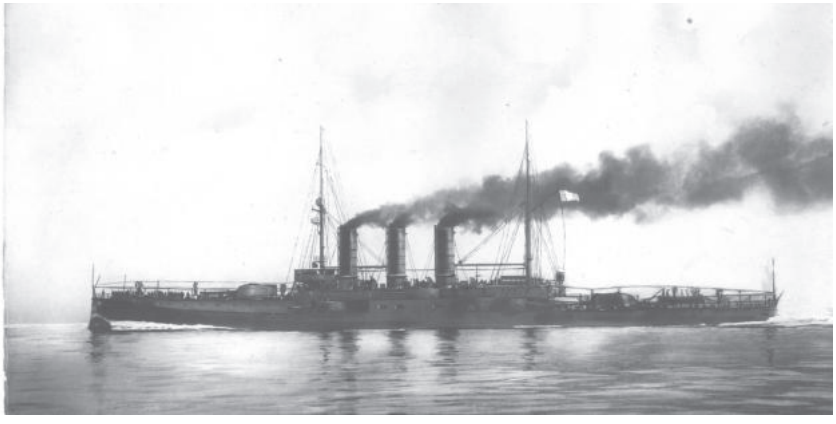
Closer to the Austro–Hungarian coast, the many islands of Dalmatia were a no-man's land. It was not feasible to supply them across the Adriatic and they had no gun emplacements and were protected only by minefields and submarines. To invade them would be possible, but to defend them was not. Austro–Hungarian counter-attacks could be launched with no warning, and completed within a night, from the many nearby islands.

Meanwhile Austro–Hungarian flying boats bombarded Bari, Molfetta, Trani and Monopoli with similarly worthless military effects, and some dozens of civilian casualties. In September 1915, the Otranto Barrage was activated, under British command, to block German U-boats from crossing the Strait, by means of constant anti-submarine patrols by auxiliary subchasers. It had been an old idea of Churchill's and half of the patrol vessels consisted of British drifters and trawlers. It was a fairly expensive and ineffective barrier until the end of the war.

From autumn 1915, the most important aspect of the theatre was the Serbian–Montenegrin front, which would collapse after the Germans joined the Austro–Hungarian Army in unleashing a new offensive. Bulgaria also declared war on Serbia on 14 October 1915.

Meanwhile, the Greek *imbroglio* began, with French and British troops arriving by sea to join a potential campaign against the Ottomans, only to discover, after disembarking at Thessaloniki on 2 October, that Athens was not going to declare war on the Central Powers. The new 'tourists' entrenched themselves around the town waiting for news.

The Entente supply line for the Balkans was by now an important route and within range of night sorties by the k.u.k. Kriegsmarine fast squadron based at Cattaro, but the operations made by the Austro–Hungarians were few and



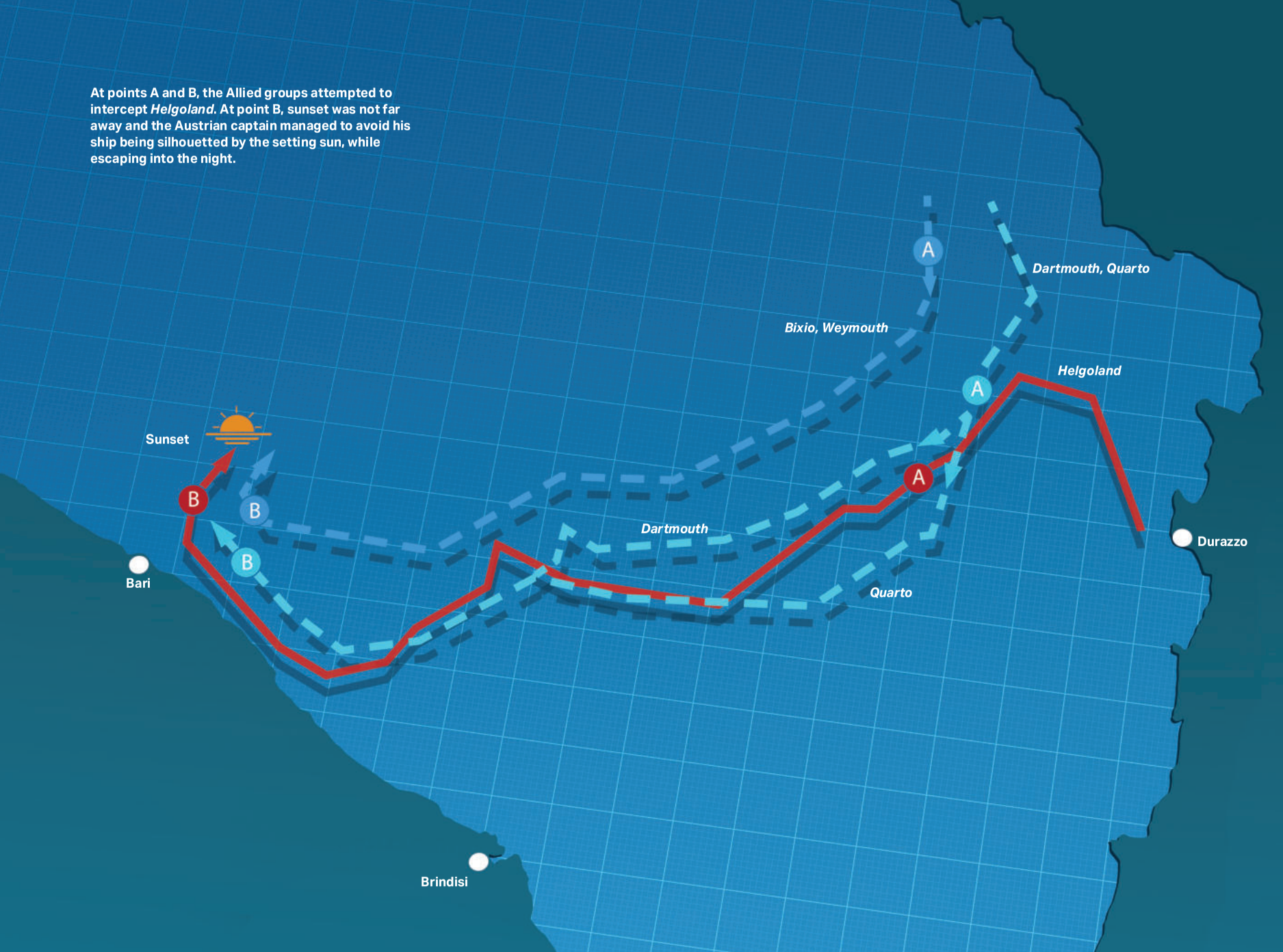
The pre-dreadnought *Regina Elena*. The Regina Elena class was a 12,625-ton cross between a battleship and an armoured cruiser. Their two 12in guns qualified them as capital ships, but what was considered their real decisive armament was their twelve 8in secondary battery. Because the ferrule of the main armament was the same as the secondary one, their 12in guns could easily be replaced with four further 8in weapons.

sank or damaged only a small number of steamers trading with commercial purposes and not involved in military traffic. These sorties were stopped on 31 December 1915 after a running action against the Allied *Dispositivo* (ships patrolling the area).

From November 1915 until April 1916, the Serbian Army retreated and the Entente fleet embarked the remaining soldiers from Corfu. The naval campaign to recover the Serbian troops was Abruzzi's masterpiece, both of seamanship and control. Despite prolonged, horrible weather, 45 Italian steamers ferried about 155,000 people with 10,000 horses in 202 sailings. The French contributed 25 steamers and the British 11, carrying about 70,000 men. The Italians also recovered 23,000 Austro–Hungarian PoWs (there had originally been 70,000 of them at the beginning of their march from the camp of Nisch), transferring them to Italy and, later, France. Italian pre-dreadnoughts of the Regina Elena class patrolled the coast. When the Thessaloniki Front (nicknamed by the Germans 'our best PoW camp') became offensive in September 1918, there were eight French divisions, four British, one Italian (although double-strength), ten Greek from the new Hellenic Army and six Serbian.

THE HUNT FOR *HELGOLAND*, 29 DECEMBER 1915

After shelling Durazzo at dawn and sinking a Greek steamer and two schooners, the new Austro–Hungarian destroyers *Lika* and *Triglav*, trying to avoid the fire of a field battery, ran into a recently laid Italian minefield, and were lost. The ciphers on the first warships were later recovered by the Italian Navy. Two Allied squadrons (see table: Southern Adriatic 1915), under Rear Adm Silvio Bellini, sortied from Brindisi to intercept the remaining Austro–Hungarian force (scout *Helgoland*, Cpt Heinrich Seitz, and two destroyers). A long-range action followed in the afternoon, with Seitz steaming westwards almost up the Italian coast, trying to work around his pursuers until nightfall would allow him to escape in the darkness. He managed to escape, triggering a dispute between the British and Italians who blamed each other (the Royal Navy also criticized the absence of Italian pre-dreadnoughts). At 1355hrs, however, the Italian cruiser *Quarto* hit *Helgoland* and at 1505hrs, HMS *Dartmouth* achieved another direct hit. The Italian Navy complained subsequently that HMS *Weymouth* did not obey a signal sent by *Bixio* (Bellini's flagship) at 1800hrs, and compromised a trap to stop *Helgoland* by coming between *Bixio* and *Helgoland*. The Austro–Hungarian scout machinery of *Helgoland* and its related protection (a strict 2.4in waterline belt) was demonstrated to be excellent.


At points A and B, the Allied groups attempted to intercept *Helgoland*. At point B, sunset was not far away and the Austrian captain managed to avoid his ship being silhouetted by the setting sun, while escaping into the night.
A
Dartmouth, Quarto
Bixio, Weymouth
Helgoland
A
A
Sunset
B
B
B
Dartmouth
Quarto
Durazzo
Bari
Brindisi

1916
Northern Adriatic

NORTHERN ADRIATIC 1916			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES****
4 Jan	**TB** 14OS, 15OS, 18OS vs two MSs	Day	Gulf of Trieste. The MSs retire under the protection of the GE
17 Jan	**TB** 19OS, 22OS, 23OS vs one MS	Day	The MS retires under the protection of the GE
3 May	**LS** *Rossarol*, *Pepe*; DD *Missori*, *Nullo* vs DD *Velebit*, *Scharfschütze*, *Pandur*, *Csikós*; TB Tb76T, 92F, 93F, 98M, 99M, 100M	Day	A brief skirmish off Porto Corsini; *Csikós*, splinter damage
22 May	MAS 19 vs Armed Motor Boat *Leni*	Day	*Leni* is boarded and her crew captured. Some A–H minefield charts are seized. *Leni*, partially sunk in shallow water, was later recovered by the A–H Navy
22 May	**TB** 15 OS	Night	**Punta Salvore**
24 May	**TB** 21OS, 22OS vs DD *Velebit*, *Scharfschütze*, *Dinara*, *Reka*; TB Tb89F, 92F, 98M, 99M, 100M, 75T	Night	A brief action off Chioggia; *75T* (1) and *21OS* (1) damaged
25 May	MAS 19		A brief day-gun engagement off Trieste against an A–H armed tug retiring under the protection of GE
28 May	**TB** 24OS	Night	Forcing action inside Trieste. 24 OS (splinter damage); her torpedoes launched against a steamer hit a mole. She was able to return home because her commander, Lt Gravina, fluent in German, persuaded the sentries inside and outside that he was Austrian
12 Jun	**DD** *Fuciliere*, *Alpino*, *Zeffiro*; **TB** 40PN, 46OS	Day	**Parenzo**, **San Nicolò** (Istria). *Zeffiro* splinter damage from GE
23 Jun	DD *Uskoke*, *Streiter*	Day	**Giulianova**
25 Jun	**TB** 19OS, 20OS, 21OS	Night	**Pirano**
27 Jun	**TB** 1PN, 3PN, 4 PN, 6 PN	Day	**Trieste** 1 PN splinter damage from GE
11 Jul	**DD** SF *Alpino*, *Fuciliere*, *Carabiniere*, *Zeffiro*. EF **LS** *Pepe*, *Poerio*; **DD** *Missori*, *Nullo*, **TB** 1PN, 3PN, 4PN, 6PN, 8PN, 10PN, 11PN, 12PN while 19OS, 20OS, 21OS, 22OS, 24OS lays a minefield	Night	**Parenzo**. *Zeffiro* (s) GE followed by a brief skirmish between TBs 4PN and 92F
5 Aug	**TB** 24OS, 40PN, 46OS, *MS Timavo*	Day	**A–H Littoral front line**
10 Aug	**TB** 40PN, 41PN, 46OS, 58OS, two **MAS**s, **MS** *Timavo*	Day	**A–H Littoral front line**
11 Aug	**TB** 1PN, 3PN, 4PN, 24OS vs TB Tb91F, 94F, 98M	Night	Skirmish 3 PN (s)
13 Sep	**TB** 40PN, 41PN, 42PN, 46OS	Night	**Punta Grossa**
13 Sep	**TB** 1PN vs two TBs escorting three small steamers	Day	A brief action off Porto Quieto. The convoy retired under the protection of GE
16 Sep	Eight Italian **TB**s	Day	**Punta Salvore**

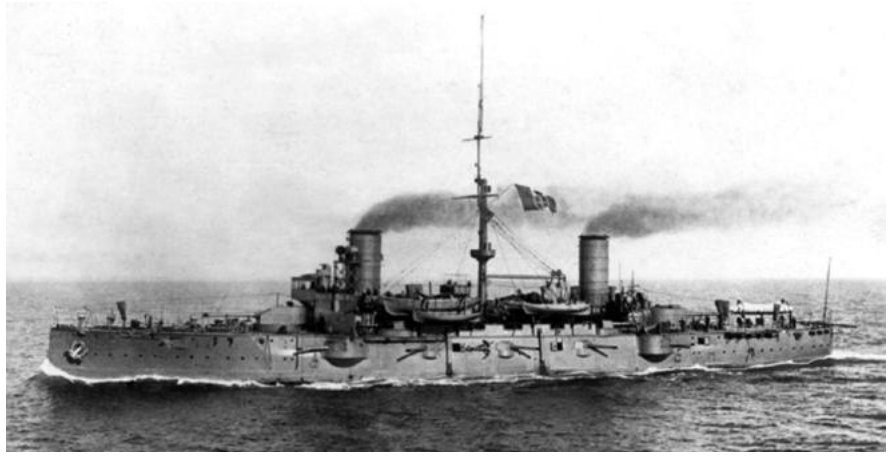
DATE	SHIPS INVOLVED*	DAY OR NIGHT ACTION	TARGETS AND CONSEQUENCES**
2 Nov	**TB** 9PN, **MAS** 20	Night	Forcing action inside the Fasana Channel. Only minor damage (two holings) sustained by the guard ship *Mars* as both torpedoes were duds due to poor maintenance. MAS 20 (Lt Ildebrando Goiran) was able to come back as 9PN (Lt Domenico Cavagnari) violated his orders and remained waiting for the MTB after opening the booms
5 Nov	TB Tb83F, 87F, 88 F	Night	**Sant'Elpidio a Mare**
30 Nov	Two Italian **TB**s vs two MSs	Day	The MSs retire under the protection of the GE
*Allied ships in bold ** Place names in bold indicate a bombardment action			

In 1916 the Italian Navy confirmed its aggressive strategy in the Northern Adriatic. The Inshore Squadron's daily activities are innumerable. Among the most important were:

- 28–29 March 1916. North of Monfalcone: 380 Italian big gun rounds were fired against Austro–Hungarian Army batteries.
- 14–16 May 1916. Porto Rosega: a large Imperial Army attack, ordered to support the Austro–Hungarian offensive from Trentino (*Strafexpedition*) was stopped in the marshes, 220yds from their objective. Austro–Hungarian forces were blasted out of the water by the 6in-gun battery of Lt Angelo Parona (the future admiral who commanded Italian submarines in the Atlantic in 1940–41 and, later, the III Divisione heavy cruisers during the two battles of Sirte).
- 14–17 June 1916. North of Monfalcone: 830 rounds fired by the RM, including 12in shells; the Austro–Hungarian forces' reply was limited to an air raid which damaged a pontoon.
- 28–29 June 1916. 1,218 RM rounds repulsed an Austro–Hungarian Army attack east of Monfalcone.

The 14–16 May episode is important as it was a response to the Austro–Hungarian Army's request to its Navy to support a planned, decisive offensive along the Alps. This was unleashed on 15 May by the Army on the Italian front, using about 30 divisions against 49 Italian ones. The k.u.k. Kriegsmarine was asked to attack Venice, in the meantime, but Adm von Haus replied that the town was too well defended by the coastal batteries supporting the battleship squadron and light forces based there, not to mention the minefields and submarines. Not even a bombardment was considered possible. By 25 June, the Austro–Hungarian offensive was over, and from the second half of 1916, the Italians had the upper hand in terms of maritime air superiority, as the k.u.k. Kriegsmarine admitted openly. The effects were modest, but recognizable.

Warship losses to aircraft in early 1916 were all Italian. On the night of 19–20 March, the destroyer *Bersagliere* was damaged by a near-miss bomb dropped



The armoured cruiser *Garibaldi* – a very successful design, seven others were sold to Argentina, Spain and Japan. An intermediary between battleships and armoured cruisers, the Italian Navy considered them capable of fighting in the line of battle as their 10in gun was able to pierce the classic Schneider and compound steel plates, introduced into vessels from 1880 as side armour. By early 1916, the Garibaldis were considered too slow (18–19 knots) and were transferred to defensive roles.

by flying boats at Valona. She was beached and, a few days later, refloated and repaired. On 17 April, the torpedo boat 5PN was damaged, off Trieste, by a bomb. On 16 May, the destroyer *Missori* was damaged by splinters off Parenzo, and on 12 June the destroyers *Alpino* and *Fuciliere* were damaged off the Istrian coast. However, the balance tipped during the rest of 1916. On 24 August, the auxiliary minesweeper *Elöre* was sunk at Fiume by Italian Army Caproni Ca. 2 bombers. She was repaired and returned to service. Previously, on 9 August, during a night raid, Austro–Hungarian flying boats had sunk the British submarine HMS B 10 in Venice. On 26 August, two flying boats sank the British drifter *Rosies* in the Strait of Otranto. On 21 December, Italian flying boats damaged the torpedo boat 57T at Pola. The French submarine *Foucault* was scuttled after a k.u.k. Kriegsmarine flying boat heavily damaged her on 15 September off Cattaro.

RM submarine activity inside the Dalmatian Islands barrier was even more intense. Austro–Hungarian convoys supplying the new front in Albania had to be escorted and the warships used for this task – torpedo boats – had not been designed for such a role. Since July 1916, machinery defects were common, and too many k.u.k Kriegsmarine boats were out of service for refit and repairs. RM submarines found them easy prey.

Valona, 17 October 1916. The commander of the Austro–Hungarian submarine U 16 leaving the pre-dreadnought battleship *Regina Margherita*. The boat torpedoed and sank the old Italian destroyer *Nembo*, escorting a tanker, and was in turn sunk a few minutes later by the destroyer's depth charges which exploded underwater.

On 28 August, Italy declared war on Germany. Such an initiative had not been requested by the Entente in 1915 and had been avoided by Rome, still hopeful for a general peace to satisfy Italy's ambitions while preserving the European balance of power. Berlin had also been careful not to break diplomatic relations with Rome for the same purpose and avoided publicizing the – relatively light – fighting and casualties the German Alpenkorps sustained in the Trentino Alps before being retired at the end of 1915.

But now such a policy was no longer feasible, as the conflict was becoming more and more merciless. After the first year of war, Italy's aspirations were now greater: a role in the internationalization of Palestine and a protectorate over a slice of Anatolia. But for these goals it was necessary to give up any diplomatic subtlety, and support Britain, France and Russia outright, the latter getting weaker and weaker.

Southern Adriatic

SOUTHERN ADRIATIC 1916			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES****
3 Jan	AC *Sankt George*; Scout *Helgoland*; DD *Wildfang*; TB 83F, 87F, 88F	Day	**Ortona, San Vito Chetino**
7 Jan	AC *Kaiser Charles 1 VI*; PCr *Kaiser Franz Joseph I*, *Aspern*, torpedo cruiser *Panther*	Day	**Mount Lovcen** inside the Bay of Cattaro; bombardment renewed on 8, 9 and 10 January
27 Jan	Scout *Novara*; two DDs vs **PCr.** *Puglia*; **DD** *Bouclier*	Day	A very brief, long-range action; A–H flank speed was 28 knots, the Allied one 20
6 Feb	**CL** *Weymouth*; **DD** *Bouclier* vs Scout *Helgoland*; TB 74, 78, 80, 83, 87, 88	Day	A long-range skirmish. TB 83 and 74 damaged by a collision. Allied top speed 25 knots vs 28
6 Feb	**CL** *Liverpool*; **DD** *Bronzetti* vs DD *Wildfang*	Day	A brief action. The A–H destroyer retired under the GE protection
19 Feb	**DD** *Bronzetti*, *Schiaffino*	Day	**A–H Littoral front line** near **Malboreto (Albania)**
23-Feb	SF **PCr** *Libia*, *Puglia*; **Torpedo-Cruiser** *Agordat*; 3 **ACr**; 7 **DD**. EF **BB** *Regina Elena*, *Napoli*; *Scout Marsala*; **CL** *Weymouth*, *Liverpool* escorted by Italian and French DDs	Day	**A–H Littoral front line** near **Malboreto (Albania).** The shore bombardment is renewed on 24, 25 and 26 February. The armoured cruiser *Città di Siracusa* (1) damaged by a field battery
14-Mar	**DD** *Faulx*, *Cdt Renaudi*, *Schiaffino* vs MSs *3* and *4*	Day	A brief chase. The MSs retire under the protection of GE. *Schiaffino* sinks an A–H sailing ship
15-Mar	**DD** *Animoso*, *Insidioso* vs DD *Orjen*	Day	A brief chase, off the Gulf of Drin (Albania), for a large A–H pontoon towed by a tug. The pontoon is sunk and the tug, damaged, reaches the protection of GE
18-Mar	**DD** *Insidioso*	Day	A brief chase, off Durazzo, of a little A–H steamer which reached the protection of GE
9-May	**DD** *Corazziere*, *Aquilone*	Day	**Semeni** (Albania). The newly completed wooden moles are destroyed
31-May	DD *Orjen*, *Balaton*; TB 77T, 79T, 81T	Day	The British drifter *Beneficent*, patrolling the Otranto Barrage, is sunk
6-Jun	MAS 5, MAS 7	Night	Forcing Durazzo. The A–H steamer *Lokrum* – the only one with a shallow draught and a turn of speed able to counter the Bojana river flow and reach the Lake of Ocrida eastern front in Albania – is sunk
15-Jun	MAS 5, MAS 7	Night	A failed forcing action off San Giovanni di Medua (Albania)
15-Jun	**DD** *Pilo*, *Bronzetti*, *Mosto*, *Audace* vs DD *Wildfang*	Night	A brief action off San Giovanni di Medua; *Wildfang* (1) damaged

Continued on page 44

DATE	SHIPS INVOLVED*	DAY OR NIGHT ACTION	TARGETS AND CONSEQUENCES**
25-Jun	MAS 5, MAS 7	Night	Forcing action inside Durazzo; the A–H steamer *Sarajevo* is sunk. Both MASs sustain splinter damage
8-Jul	Scout *Novara*, TB 73F, 54T, 87F	Night	Strait of Otranto. The patrolling British drifters *Astrum Spei*, *Clavis* and *Frigate Bird* are sunk and *Ben Bui* damaged
9-Jul	**DD** *Bronzetti*	Day	An A–H brig sunk off Capo Laghi near Cattaro
9-Jul	**DD** *Impetuoso*, *Irrequieto* vs Scout *Novara*	Day	A brief chase of the scout which reaches Cattaro's GE
2-Aug	**DD** *Wildfang*, *Warasdiner*	Day	**Molfetta**
2-Aug	MAS 6	Night	Forcing Durazzo after a previous attempt failed on 24/25 July night because of bad weather. No targets
2-Aug	SF DD *Wildfang* e *Warasdiner*. EF PCr *Aspern*, TB 80T, 85F chased by **DD** *Cdt. Bory*, *Bisson*, *Ardito*, *Ardente*, *Impavido*, *Abba*; *Scout Bixio*; **CL** *Liverpool*	Day	After escorting MAS 6, the Allied warships engage A–H destroyers coming home after shelling Molfetta. The *Aspern* group and GE are able to protect them. *Bixio* and *Liverpool* are still too far and outranged. *Wildfang* (1) and *Warasdiner* suffer splinter damage
8-Oct	**DD** *Bronzetti*, *Pilo* vs TB Tb68	Night	A brief encounter off San Giovanni di Medua. Tb68 reaches the protection of GE
3-Nov	MAS 5, MAS 7	Night	Forcing Durazzo. The torpedoes explode against a net protecting a freighter
5-Nov	**DD** *Abba*, *Nievo*, *Pilo*; **TB** 34PN, 35PN, 36PN vs TB 83F, 87F, 88F	Night	A brief skirmish after the A–H TBs shell **Sant'Elpidio a Mare**
22-Dec	DD *Scharfschütze*, *Reka*, *Dinara*, *Velebit* vs **DD** *Casque*, *Protet*, *Cdt Rivière*, *Cdt Bory*, *Dehorter*, *Boutefeu*, *Abba*, *Nievo*, *Pilo*, *Impavido*, *Irrequieto*; **CL** *Gloucester*	Night	Strait of Otranto. *Cdt Rivière* (5), *Casque* (1), *Scharfschütze* (3), *Reka* (2), *Dinara* (2) damaged. After the action, there is a night collision, with damage sustained between *Boutefeu*, *Casque* and *Abba*
*Allied ships in bold ** Place names in bold indicate a bombardment action			

On 27 April 1916, the French battlefleet left Malta for Corfu, an act which compromised Greece's helpless 'neutrality' even more.

As usual, the k.u.k. Kriegsmarine surface warships made a few night sorties against the traffic with Albania and the Otranto Barrage. From 3 April to 22 December 1916, 11 sortied (eight of them without sighting anything) and had no success in severing Italian communications with Albania, where an average of two Italian divisions and two Austro–Hungarian ones fought until the end of the conflict. With Italy's goal being the defence of the coastal city of Valona, the Entente's relationship with Greece became more and more antagonistic. In May 1916, Athens allowed the Bulgarians to enter Greece, as a counterbalance to the Entente, and they occupied Fort Rupel – the Hellenic bastion of the Thracian region – gradually between August and September.

During those two very long months, the Italians induced the Greeks to retreat from their positions in southern Albania (or Northern Epirus, according to the two different points of view), thus joining the Valona front line with the new Thessaloniki bridgehead. This advance was consolidated further when, on 11 October, the Hellenic fleet was seized by the Entente. Greece was becoming a country divided between the king, defending an increasingly problematic neutrality, and the pro-Allies former Greek Prime Minister Eleftherios Venizelos.

On 1 December a battle was fought at Piraeus by the French and British against Greek troops and civilians. The Allies retired and declared a naval blockade of Greece which caused widespread starvation until the abdication of King Constantine, on 6 June 1917. At this stage, according to Italian Army codebreakers, the Austro–Hungarian Army was asked by Berlin to try, with German help, to advance inside Albania. The idea was to join up with the Habsburg Army using two Hellenic Corps led by pro-Germany generals, then push back from Greece to Epirus, thus creating a continental bastion from the Black Sea to Fiume which had been envisaged by Germany in July–August 1914. In response, the Italian and the French battlefleets buried their differences for a while. On 1 December, they concentrated their respective dreadnoughts together at Corfu in preparation for any sortie by the k.u.k. Kriegsmarine's battleforce outside the Strait of Otranto. Admiral von Haus's squadrons had the theoretical range to sail as far as the Ionian Islands before returning, but the Franco–Italian squadron could pit ten modern battleships against his four. By 20 January 1917, the German pipe dream was over, the Italian battleships were at Taranto again, and the war went on as usual. Admiral von Haus died on 8 February 1917 and his successor, Admiral Maximilian Njegovan, confirmed the previous k.u.k. Kriegsmarine strategy.

On 11 December 1916, the loss of the pre-dreadnought *Regina Margherita* off Valona to a mine laid by the German submarine UC 14 caused serious casualties (672 men). However, no damage was done to the *Dispositivo*. This battleship, along with the old armoured cruisers *Varese* and *Ferruccio*, was by now considered too slow and vulnerable, and at the beginning of 1916, all were allocated to the 'C' group, whose main task was the defence of the Valona-entrenched camp. The 'B' group (the four Regina Elenas, three Italian scouts, two British light cruisers and, later, the three most modern Italian armoured cruisers – *San Giorgio*, *San Marco* and *Pisa* – coming back from Venice) had to patrol the Strait of Otranto, while 'A' group was formed by the dreadnoughts at Taranto.

The armoured cruiser *Pisa*. The Pisa class was a three-funnelled ship which later evolved into the four-stacker San Giorgios. This class were sometimes called battleships by the press because the development of the Garibaldis and the two following San Giorgios as fast scout vanguards had been conceived so they could fight with the capital ships in the Italian line of battle. Although outmoded by the advent of battlecruisers, they had long careers, except for *Amalfi*, sistership of *Pisa*, who was sunk by the German submarine UB 14 on 7 July 1915.

1917

On 9 February, 1917, Thaon di Revel returned to command the RM following a meeting between him and the king in December 1916. The Duke of Abruzzi was removed on 4 February and the CoS became the commander-in-chief of the battlefleet, now called the *Forze Navali Mobilitate*, and included the decisive convoy escort forces. Minister Corsi was replaced, in June, by, at first, Adm Arturo Triangi and, from 16 June 1917, by Adm Alberto Del Bono. They were all under Thaon di Revel's command. The CoS delegated the command of the battlefleet at first to Adm Emanuele Cutinelli Rendina followed, in June, by Adm Vittorio Cerri and, in March 1918, by Adm Lorenzo Cusani Visconti. Thaon di Revel reappointed his old Northern Adriatic command to himself and remained in Venice, strongly believing the endgame would be played out there.

The infamous Prince Sixtus affair occurred in March with an overture towards the Entente by the new Habsburg Emperor, Charles I. He asked for a general peace in Europe, but the British and the French wanted nothing short of an overturning of the alliances, with Vienna declaring war on Germany. Charles I militarily didn't have a chance of turning his back on his former allies, lacking central reserves, coupled with the impossibility of his German-language subjects accepting this sort of proposition. He also didn't want to give up any Italian territory despite the lands lost between 1915 and 1917. It was not an easy situation; up to September 1917, the Italian Army had conquered almost the same amount of land recovered by the French and British armies in France between May 1915 and November 1917 – Artois to Champagne, Somme, Aisne and Flanders – paying the same terrible price in blood. Accordingly, Charles I asked London and Paris to propose a solution, maybe the gifting of a colony to Italy in compensation. This was a deal the British Prime Minister Lloyd George refused, stating in June 1917 that the Austro–Hungarian Empire had to accept the promises made to Rome by the Entente in signing the Treaty of London. Feelers continued to go out anyway, with little hope, until 1918.

Northern Adriatic

NORTHERN ADRIATIC 1917			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES****
22 Feb	MAS 1	Night	A failed raid by a small party against Parenzo
11 May	DD *Csikós*; TB Tb96F, 78T, 93F vs **DD** *Animoso*, *Ardito*, *Ardente*, *Abba*, *Audace II*	Night	A brief skirmish

DATE	SHIPS INVOLVED*	DAY OR NIGHT ACTION	TARGETS AND CONSEQUENCES**
24 May	SF **Monitor** *Earl of Peterborough*, *Sir Thomas Picton* escorted by three LSs, 11 DDs, five TBs and two GBs	Day	**Prosecco Airfield.** The British monitors fire 32 12in rounds. HMS *Earl of Peterborough* was hit by a bomb dropped by an A–H flying boat. The Italian self-propelled pontoon *Valente* (one 12in) joined the action when the monitors had to zigzag to avoid the enemy aircraft, shelling **Santa Croce**
25 May	MAS 18 vs one armed tug	Night	A brief engagement off Trieste; the tug reaches the protection of GE
3 Jun	MAS 14, 15, 19 vs DD *Wildfang*, *Csikós*; TB Tb93F, 96F	Night	A brief gun encounter off the River Tagliamento's mouth
18 Aug	SF **Monitor** *Earl of Peterborough*, *Sir Thomas Picton*; 15in self-propelled pontoons *Cappellini*, *Faà di Bruno*; **TB** 40OS, 41OS, 42PN, 46OS, 48OS, 58OL; EF 13 **DD**s, 13 **TB**s, 15 **MAS** boats and seven submarines. The British monitors were the decoy, the main bombardment force was formed by the self-propelled pontoons *Valente* and *Monfalcone* (both armed with one 12in gun), *Robusto* (two 8in), towed pontoons *Capitano Masotto* and *Capitano Bianchini* (one 7.5in each) and two minor ones	Day	**A–H Littoral front line**. Shelling repeated on 21 and 23 August. The British monitors fire a total of 175 rounds. The Italian self-propelled pontoons total more than 2,000 rounds
18 Sep	**TB** 13OS, 15OS, 16OS	Night	A failed raid by a small party against Parenzo
22 Sep	**MAS** 1, **TB** 13OS, 14OS, 15OS, 16OS, 18 OS	Night	A failed raid by a small party against Parenzo
23 Sep	**MAS** 16 vs TB 77T, 78T	Night	A skirmish off Grado; the A–H TBs retire when MAS 13, 17 and 53 arrive
24 Sep	**TB** 9PN, 10PN, 11PN, 12 PN vs four TBs	Night	A brief action off Leme Channel (Istria)
24 Sep	MAS 20 vs one TB	Day	The A–H TBs retire when the DDs *Pontiere* and *Carabiniere* join the action A brief skirmish in the Gulf of Trieste
29 Sep	DD *Turul*, *Velebit*, *Huszár*, *Streiter*; TB 90F, 94F, 98M vs **LS** *Sparviero*, **DD** *Abba*, *Orsini*, *Acerbi*, *Stocco*, *Audace II*, *Ardente*, *Ardito*	Night	Action off Punta Maestra and Parenzo: *Sparviero* (5), *Orsini* (1), *Velebit* (*1*), *Huszár* (1), *Turul* (s), TB *94 F* (s) damaged
27 Oct	TB Tb4, Tb6, Tb9	Night	**Punta Sdobba**
14 Nov	TB Tb84F, 92F, 94F, 99M, 100M vs **DD** *Animoso*, *Ardente*, *Audace*, *Abba*	Day	A brief action off the mouth of the Piave River
14 Nov	A reconnaissance by A–H TBs is repulsed by the RM 6in coastal battery Bordigioni after an exchange of fire	Day	**Cortellazzo**
15 Nov	A renewed reconnaissance and minesweeping mission is repelled by the Bordigioni battery	Day	**Cortellazzo** Any surprise in the area is by now definitively lost, but the menace of the Italian minefields was considered too serious to avoid pre-emptive minesweeping operations
16 Nov	BB *Budapest*, *Wien*; TB Tb6, Tb9, 84F, 92F, 94F, 98M, 99M, 100M; minesweeping force TB Tb23, Tb27, Tb30, Tb61, Tb65	Day	**Cortellazzo**. The local RM 6in battery remained untouched and damaged *Wien* (7) and *Budapest* (1)

Continued on page 48

DATE	SHIPS INVOLVED*	DAY OR NIGHT ACTION	TARGETS AND CONSEQUENCES**
16 Nov	BB *Budapest*, *Wien*; TB Tb6, Tb9, 84F, 92F, 94F, 98M, 99M, 100M; minesweeping force TB Tb23, Tb27, Tb30, Tb61, Tb65 vs **DD** *Orsini*, *Acerbi*, *Animoso*, *Stocco*, *Ardente*, *Abba*, *Audace II*; **MAS** 9, 13, 15	Day	A double, combined charge by Italian destroyers covering an action by MTBs. MAS 15 is damaged by splinters; the A–H Battle Squadron turned away
16 Nov	**BB** *Saint Bon*, *Emanuele Filiberto*; **DD** *Ardito*, *Sirtori* plus **DD** *Orsini*, *Acerbi*, *Animoso*, *Stocco*, *Ardente*, *Abba*, *Audace II* vs BB *Budapest*, *Wien*; TB Tb6, Tb9, 84F, 92 F, 94F, 98M, 99M, 100M; minesweeping force TB Tb23, Tb27, Tb30, Tb61, Tb65	Day	The A–H Squadron sighted the Italian battleships and took avoiding action coming back to Trieste
18-Nov	**Monitor** *Earl of Peterborough* escorted by eight DDs and seven TBs	Day	**A–H Littoral front line**. Total 28 rounds fired. The bombardments were renewed on 20 and 30 November
18 Nov	**DD** *Abba*, *Ardente*, *Audace*, *Animoso*	Day	**A–H Littoral front line between Reverdoli, Santa Croce and Caorle**
19 Nov	SF DD *Stocco*, *Orsini*, *Ardito*, *Sirtori*	Day	**Reverdoli**, **Santa Croce** and **Caorle**. The four destroyers are protected by the BB *Saint Bon* and *Emanuele Filiberto* and by the DD *Ardente*, *Audace* and *Abb*a. The A–H reaction is limited to the 6in battery of Grado
21 Nov	**DD** *Animoso*, *Audace*, *Ardente*, *Abba*	Night	**Grisolera**
23 Nov	**DD** *Animoso*, *Audace*, *Ardente*, *Abba*	Day	**Grisolera**
25 Nov	**DD** *Animoso*, *Audace*, *Ardente*, *Abba*, *Stocco*, *Orsini*, *Ardito*, *Sirtori*	Day	**Grisolera**
25 Nov	**GB** *Capitano Sauro*, *Folgore*	Day	**A–H front line** going up along the Piave River, shelling and landing naval infantry raiding parties. *Folgore* stranded and recovered by the Italians in December
28 Nov	DD *Triglav II*, *Dinara*; TB 79T, 86F, 90F	Day	**Senigallia**
28 Nov	DD *Streiter*, *Huszár*, *Reka*, *Dinara*; TB 82F, 87F, 89F, 95F	Day	**Porto Corsini**, **Cesenatico**
28 Nov	DD *Triglav II*, *Dukla*, *Réka*; TB Tb78T, 79T, 86F, 90F	Day	**Fano**, **Marotta**
9 Dec	MAS 9, MAS 13	Night	Forcing Trieste; the BB *Wien* is sunk
10 Dec	**Monitor** *Sir Thomas Picton* escorted by six DDs and seven TBs	Day	**A–H Littoral front line**
14 Dec	MAS 16, MAS 19	Day	A–H front line going up along the Piave River. MAS 16 was sunk. The hulk is recovered by a daring action that very night to prevent the A–H Navy studying the Italian MTBs
19 Dec	BB *Budapest*, *Árpád*; Scout *Admiral Spaun*; DD *Triglav II*, *Lika II*, *Dukla*, *Scharfschütze*, *Streiter* e *Turul*; TB Tb3, 5, 6, 7, 84F, 92F, 94F, 98M, 99M, 100M; minesweeping force: TB Tb20, 23, 27, 30, 32, 34, 37, 61, 65, 66	Day	**Cortellazzo**
19 Dec	SF **LS** *Sparviero*, *Aquila*. EF **DD** *Animoso*, *Abba*, *Audace II*, *Ardente*; **TB** 9PN, 10PN, 11PN, 12 PN, 13OS, 16 OS and five **MAS**	Day	**Grisolera**
*Allied ships in bold ** Place names in bold indicate a bombardment action			

The Northern Adriatic actions continued, but more emphatically. The Inshore Squadron operations were increasingly important. On 28 May, the self-propelled pontoons *Carso* and *Sdobba* (each armed with two 7.5in guns) shot down, at long range in the Gulf of Trieste, a rarely sighted daylight Austro–Hungarian convoy of pontoons towed by tugboats. The k.u.k. Kriegsmarine recorded two pontoons sunk and convoys such as this were stopped.

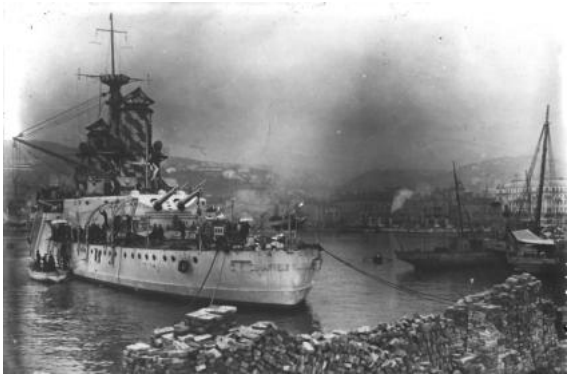
The British monitor *Sir Thomas Picton,* 1917. Royal Navy monitors were able to do 5 knots and were armoured unlike the Italian bigger pontoons, which just had concrete cofferdams and splinter protection. It was soon recognised, however, that the British monitors needed too many escorts compared to the amount of ordnance they could fire. They were, however, excellent decoys for attracting enemy aircraft.

Naval gunfire support for the Italian Army reached its peak between 18 and 20 August along the front line. Two British monitors and the Italian 15in self-propelled pontoons were protected by flotillas of destroyers, torpedo boats, MAS boats, submarines and minesweepers, plus minefields and aircraft, while the two old pre-dreadnought battleships *Emanuele Filiberto* and *Saint Bon* were always ready to sail with their own escort. A total of 8,155 rounds were fired during those two days alone against any logistic target within the big guns' range, resulting in the spectacular explosion of some Austro–Hungarian ammunition depots.

The scale of the naval air war developed rapidly. On 10 May, Italian bombers damaged the steamer *Cracovia* at Trieste and on 4 August Italian night bombers sank a pontoon in the Pola yard. Much more was on the horizon. Air power demonstrated its possibilities on 5 September when, after two weeks of raids (183 sorties, 136 of them by RM flying boats), the k.u.k. Kriegsmarine coastal battleship *Wien* (sent on 22 August from Pola to Trieste with her sister ship *Budapest*, in case of a collapse of the front along the Isonzo River) was damaged by a near-miss bomb (1yd) causing a 130ft hole under the waterline. The two battleships had to come back to Pola on 13 September.

In revenge, on the night of 7 September, Austro–Hungarian bombers caused slight damage to the old Italian armoured cruiser *Carlo Alberto*, which since May 1915 had been used as a depot ship in Venice; a barge was also lost. On 27 September, a raid on Brindisi by flying boats caused slight damage to the armoured cruiser *Pisa* and on 21 December the Austro–Hungarian torpedo boats 57T and 68F were damaged by bombs at Pola. The RM also tested an experimental Caproni three-engined torpedo bomber at Pola on 20 September 1917. The attack was not a success and the Italian Navy Air Branch pursued a different solution using a smaller SIA 9b bomber. The tests and training were still going on by the end of the war.

On 4 November 1917, during an Allied Naval Conference in London, the Admiralty asked the RM to send three dreadnoughts and its three newest armoured cruisers to Scapa Flow. It was a British endeavour to multilateralize operations in home waters and avert political consequences in revolutionary Ireland, where the planned arrival of pro-independence American battleships was causing concern. Britain had also asked the Japanese, first to lease and



The pre-dreadnought *Emanuele Filiberto,* Fiume, 1919 with her funnels protected against bombs. Commissioned in 1901–02, the two ships of this class were considered slow (18 knots) by 1913. From 1915, they were based in Venice as expendable battleships in the Northern Adriatic. Their innovative and robust protection (9.8in sides of Harvey steel) and the punch of their four 10in guns allowed them to fight against Austro–Hungarian coastal battleships during World War I at the 5,000–8,000yds range envisaged when they were designed in 1892–93.

then to send some battleships, but both Rome and Tokyo declined. The British request was seen as confirmation, after Jutland and their behaviour on 15 May 1917 during the Action in the Strait of Otranto (detailed on p. 57) that their mythical 'Nelson's touch' was no more and that Italy would have a post-war window of opportunity to gain a more powerful naval position in the Mediterranean and beyond. In the end, nine US Navy battleships arrived in December 1917, between Scapa and Bantry Bay but did not fire a single shot. Their presence, however, did allow President Wilson to chair the Entente strategy meeting in 1918 in recognition of the sheer power of numbers of the US Navy which could curtail the force of the German battlefleet. The American ships also smuggled the first batch of the brand new Thompson SMG to the IRA, giving the Irish rebels an unexpected advantage in fire power which helped greatly in 1919 and 1920 against the Black and Tans.

These episodes were followed by decisive operations with the defeat at Caporetto and the First Battle along the Piave River.

On 25 August 1917, the German leadership agreed to help the Habsburg Empire. The last Italian offensive, the Eleventh Battle of the Isonzo, had been too much for them, with the Italian Army now comprising 67 divisions. Seven German divisions arrived before the imminent Bolshevik Revolution, joining 48 Austro–Hungarian ones (five of them just arrived from the Russian Front). The Battle of Caporetto began on 24 October and was a huge success for the Central Powers. By 8 November, they had advanced 90 miles leaving 20,000 Italian dead, 40,000 wounded and 261,000 taken prisoner. A total of 3,152 guns were lost. It was a heavy blow. A noisy minority in the Italian Parliament asked in a panic for an armistice. It was a fractious debate revealing that the Central Powers, as a consequence of Entente sea power and the related naval blockade, were starving and neither able, nor willing, to supply Italy anymore; it was, thus, impossible to negotiate peace with Berlin and Vienna. Only the United States and Britain, partly via the Channel and the French railways, could send coal and food. On 7 November, King Victor Emmanuele nominated a new *Generalissimo*, Gen Armando Diaz, a little-known candidate who was able to appreciate, unlike his predecessor Cadorna, the need the Comando Supremo had for a large and capable staff. He organized this quickly and didn't interfere with Thaon di Revel's command.

The Italian King met with the Allies the next day at the Peschiera conference. Six French divisions and five British had been in Italy since 30 October, respecting the pacts made the previous summer in the case of a German offensive in Italy, but none had gone to the front line. On 11 November, the Italians were informed that the Allied forces would remain

between Voghera and Brescia in the event of a possible retreat to the Alpine border with France. If Venice was lost, the war for Italy would be over and the Central Powers would have, with the Austro–Hungarian Army's help now available, a large central reserve of divisions much greater than the one which was actually present when the *Kaiserschlacht* offensive was unleashed during spring 1918.[7] The k.u.k. Kriegsmarine would also be free to menace sea lanes in the eastern Mediterranean, and face the French battlefleet based in the Ionian Islands.

The Italian Army, now with a strength of 57 divisions, was deployed on the Piave line (conceived and prepared in 1916) and stood alone. It was victorious against the Germans at Monte Grappa during a ferocious battle fought between 10 and 20 November. The Austro–Hungarian Army attacked at Asiago between these dates, and was also pushed back. After bad signs, at the beginning of the two previous attacks, the last offensive ordered by Vienna was at the mouth of the Piave River, at Zenson. The operation was launched on 12 November and

7 In March 1918, this German offensive destroyed the British Fifth Army of General Gought. There were more than 400,000 Britsh casualties. If the German Army had been able to use more forces by replacing some divisions using Austro–Hungarian troops to defend the quieter sections of the Western Front, the war would have been compromised or lost for the Entente. The Germans displayed little respect for their allies, nicknaming the Austro–Hungarian soldiers *Kamerad Schnürschuh*, 'Comrade Lace-ups', but used them willingly in defensive sections of the front to free their own divisions up for offensive operations.

CORTELLAZZO, 16 NOVEMBER 1917

The Cortellazzo Action was an Italian naval affair. Both the front line along the sea and the shore batteries were manned by RM personnel, while the Navy's flying boats, fighters and bombers dominated the air.

The two Austro–Hungarian pre-dreadnought battleships *Budapest* (the first ship ahead in the centre of the illustration) and *Wien* had been bombarding a coastal battery commanding the mouth of the Piave River when the RM ambushed the squadron. This illustration shows the two coastal battleships having already been hit: *Budapest*, hit by one shell under the waterline is listing to starboard, while *Wien* has sustained seven direct hits. The Italian destroyers are charging, crossing the 'T' of the Austro–Hungarian squadron, and covering a sneak attack by two MAS boats (MAS 13 and 15) off the squadron's starboard beam, less than 1,000yds from their targets. The third boat, MAS 9 has lost one engine but limps on with the others to help draw fire.

Budapest and *Wien* have concentrated their fire on the Italian destroyers. They are surrounded by eight Austro–Hungarian destroyers and torpedo boats while five further torpedo boats, in a rake formation, are minesweeping in front of the battleships. In the background the Italian coastal battery of four 6in guns (under Lt Bruno Bordigioni) is also firing at the squadron.

These surface forces are marking time until the two battleships from Venice arrive, *Emanuele Filiberto* and *Saint Bon* commanded by Adm Mario Casanova Jerserinch, who had previously commanded the destroyer flotilla fighting off Parenzo.

Informed by a message dropped from a flying boat onto the deck of *Budapest*, Cpt Mahovitsch-Ridolfi orders his squadron to return to Trieste.

On 19 December 1917, the k.u.k. Kriegsmarine tries again (Cpt Janko Vuković de Podkapeleski) to break through at Cortellazzo, this time with nine escorts for every battleship and scout. The two Italian pre-dreadnoughts *Emanuele Filiberto* and *Saint Bon* sortie again from Venice and the last k.u.k. Kriegsmarine naval effort is aborted anew. The Italian battlefleet has had the last word.

Emperor Charles I himself (directed by Kaiser Wilhelm) ordered his Navy to flank the Army. The *Schwerpunkt* (main push) was established at Cortellazzo, less than 18 miles from Venice. The Italian Navy was responsible for the defence of Cortellazzo and, on 19 November 1917, co-ordinated a successful naval triphibian action (to use a word invented by Churchill) as shown in the battlescene. The Zenson bridgehead was evacuated by the Austro–Hungarian Army on 27 December 1917, untenable under fire from Italian artillery and pontoons.

On 9 December 1917, a daring operation proposed in the spring by Lt Luigi Rizzo, inside the Vallone di Muggia, an anchorage off Trieste, was authorized by Thaon di Revel after a personal night reconnaissance of the harbour anchorage booms and nets. By means of hydraulic shears mounted on the bow, Lt Rizzo's MAS 13 was able to penetrate the booms and nets defending the pre-dreadnought coastal battleships *Budapest* and *Wien*. It was a long process, taking more than an hour, as the shears were unable to cut, and could only chew the steel cables of the barrage. It was a frosty night and the sentries on the mole were not aware of what was happening. MAS 13 and MAS 9 entered and attacked their targets and *Wien* was sunk while the other battleship was not hit, probably due to defective torpedoes. In spite of shots from the harbour, both MAS boats managed to get back unharmed.

On the night of 4–5 December, the first French and British troops reached the front, respectively at Mount Tomba and on Montello. Neither of these sectors were involved in the second battle of the Piave, which had been started by a new German and Austro–Hungarian offensive on 4 December and concluded with another Central Powers defeat on 23 December. Once more the Austro–Hungarian main attack was made at Cortellazzo and, by 18 December, had failed. A renewed k.u.k. Kriegsmarine operation against the stronghold was attempted, with little enthusiasm, on 19 December and went wrong – despite the use by Austro–Hungarian aircraft of a novelty; poison gas bombs. The RM reacted by ordering the pre-dreadnoughts *Emanuele Filiberto* and *Saint Bon* to sea again from Venice, a threat that induced the k.u.k. Kriegsmarine squadron to return to Pola.

The *esploratore Augusto Riboty*. A very successful design conceived during summer 1914 which used the already-imported high-tensile steel available after the French and the British stopped delivery of materials ordered for three 5,000-ton light cruisers. They were seaworthy and were followed, after World War I, by the *Leones*, ordered in January 1917, but laid down in 1921.

Southern Adriatic

SOUTHERN ADRIATIC 1917			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES****
12 Mar	DD *Csepel*, *Orjen*, *Tátra*, *Balaton*	Night	Strait of Otranto. An unnoticed torpedo attack against the lone French freighter *Gorgone*
21 Apr	DD *Uskoke*, *Streiter*, *Warasdiner*, *Réka*; TB 84F, 92F, 94F, 100M	Night	Strait of Otranto. The lone Italian steamer *Japigia* is sunk
15 May	DD *Csepel*, *Balaton* vs **DD** *Borea* escorting three freighters	Night	Strait of Otranto. *Borea* and *Carroccio* sunk. The steamers *Verità* and *Bersagliere* are damaged
15 May	Scout *Novara*, *Helgoland*, *Saïda*	Night	Strait of Otranto. The British drifters *Admirable*, *Avondale*, *Coral Haven*, *Craigoon*, *Felicitas*, *Girl Gracie*, *Girl Rose*, *Heleonora*, *Quarry Knowe*, *Selby*, *Serene*, *Taits*, *Transit*, *Young Linnet* sunk; *Gowan Lee*, *Floandi*, *Union* damaged. Scout *Novara* (1) recorded a 5.7cm direct hit
15 May	Scout *Novara*, *Helgoland*, *Saïda*; DD *Csepel*, *Balaton*. EF AC *Sankt Georg*; DD *Warasdiner*; TB Tb84, 88, 99, 100 vs First Allied Group **LS** *Mirabello*, **DD** *Cdt Rivière*, *Bisson*, *Cimeterre*; **CL** *Dartmouth*, *Bristol*; **LS** *Aquila*, **DD** *Acerbi*, *Schiaffino*, *Pilo*, *Mosto*; the Second Allied group **Scout** *Marsala*; **LS** *Racchia*, **DD** *Insidioso*, *Impavido* e *Indomito* was too late to join the action	Day	*Aquila* (1), *Dartmouth* (3), *Bristol* (s), *Novara* (10), *Helgoland* (2), *Saïda* (2), *Csepel* (s) damaged. After the action HMS *Dartmouth* was damaged by the German submarine UC 25 while *Boutefeu* was lost, hitting a mine
22 Aug	SF **LS** *Riboty*, *Aquila*, *Sparviero* Minelaying force **LS** *Mirabello*; **DD** *Schiaffino* EF **CL** *Weymouth*, **Scout** *Bixio* escorted by Italian and French **DDs**	Day	**Ragusa**
26 Aug	**MAS** 6, **MAS** 91	Night	Forcing Durazzo. No targets
10 Sep	**LS** *Riboty*, *Racchia*; **TB** 55AS, 56AS, 57AS, 61OL EF **CL** *Bristol* and two Italian **DD**s	Day	**Pojani, Stula, Malacastra, Fieri, Punta Semena** (Albania)
13 Dec	AU CT *Tátra*, *Balaton, Csepel*	Night	Strait of Otranto. An alleged torpedo-only night attack against enemy DDs; no such action or patrol is recorded by the Allies
*Allied ships in bold ** Place names in bold indicate a bombardment action			

The Southern Adriatic war was lively, but of little strategic relevance. The Austro–Hungarian cruiser force based at Cattaro (but depending on Pola for its maintenance, refit and repair) made ten sorties, seven of them without sighting the enemy. There was an important action on 15 May, but the goal was the auxiliary subchasers. The Allies easily replaced the losses and the (ineffective) barrage was moved, for some weeks, some miles south. The sea lanes between Italy and Albania were not compromised and the Balkan front line remained unchanged after the end of the Greek crisis. Any German hope for an alliance with Athens ended with the new Hellenic government's declaration of war against the Central Powers on 27 June 1917. On the other side, the k.u.k. Kriegsmarine appreciated that on 15 May 1917 it had endangered its irreplaceable scout force, the fundamental eyes of the battlefleet, and the three Helgolands, once repaired,

would not be used again together. Nor were any more naval bombardments conducted against southern Italian towns. It was not worth the risk in the face of the new Italian Navy coastal batteries and the armed trains which had been progressively introduced by the RM since November 1915.

THE STRAIT OF OTRANTO ACTION, 15 MAY 1917

On 15 May 1917, after the sinking of the old Italian destroyer *Borea*, an Allied force under Adm Alfredo Acton (after the war CoS of the RM in 1919–21 and, again in 1925–27) fought a prolonged action against an Austro–Hungarian squadron under the command of Cpt Horthy. The Allies ended the chase after sighting reinforcements from Cattaro, led by the armoured cruiser *Sankt Georg*.

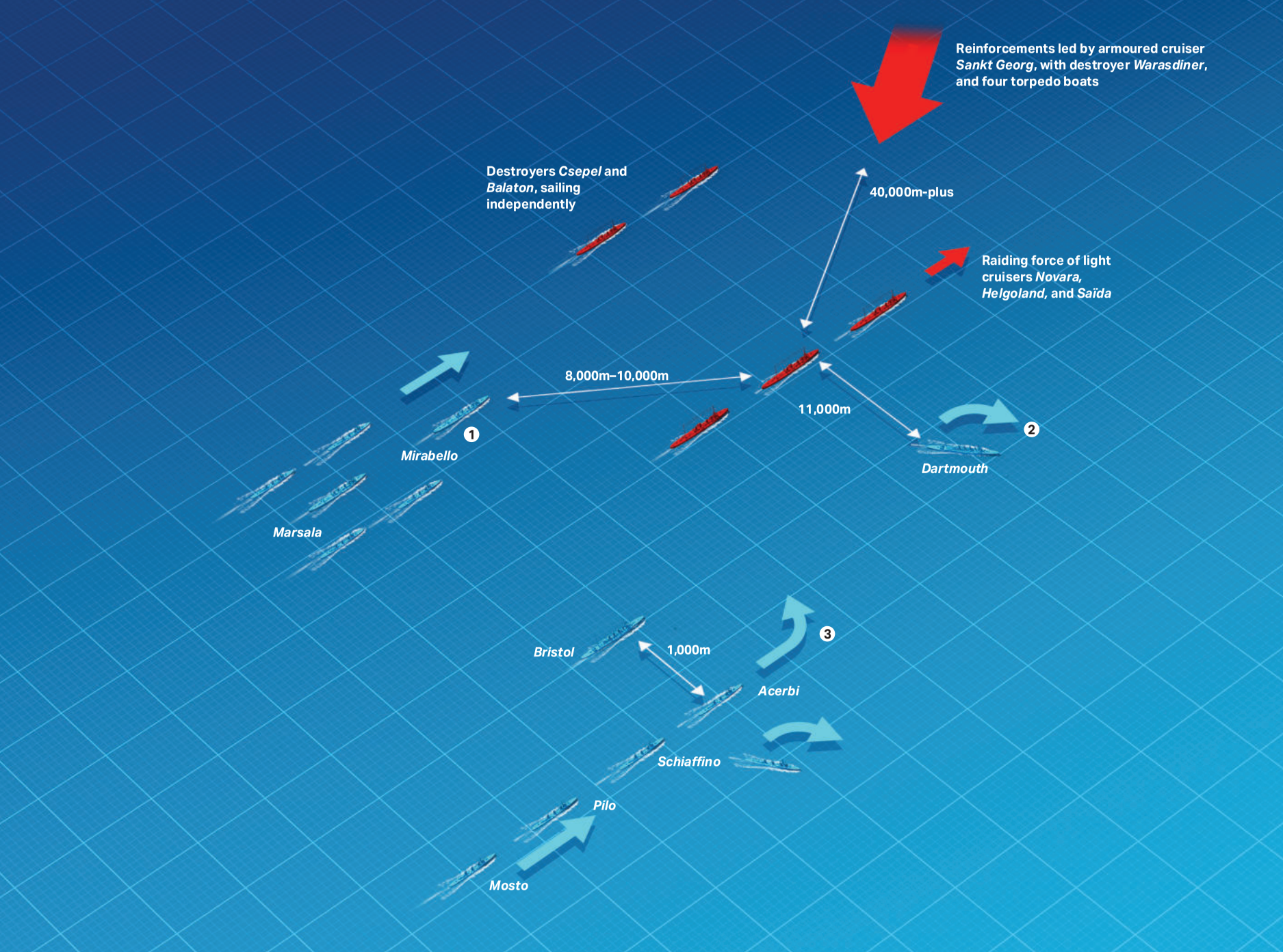
The key moments of the action were (**1**) when the Italian light scout *Mirabello*, sailing at 32 knots to windward of the smoke curtain covering the k.u.k. Kriegsmarine's warships and, leaving behind slow French destroyers, hit SMS *Novara* three times (plus three near-misses), but was then slowed, at 1025hrs by a machinery defect. The Italian 4in shells didn't have the punch necessary to stop the Austro–Hungarian scouts (who had a 2.4in belt and 0.79in deck protection against splinters) and HMS *Dartmouth* was now the only Allied warship within range. She hit *Novara* at 1035hrs who reduced her speed three quarters of an hour later as she exhausted the water in her boilers.

The Austro–Hungarian shooting was good and *Dartmouth* was 'straddled rather badly'. At 1100hrs, *Dartmouth* was hit (for the third time) by a 3.9in round (acknowledged to be a 6in round as Austro–Hungarian bursting charges had aluminium added). The resulting fire necessitated the flooding of the forward magazine and her Captain ordered a turn to starboard. Aboard *Dartmouth*, Adm Acton was puzzled by the turn. Later the British Captain said it had been an order from the Admiral, who denied this noting that during that phase *Dartmouth* was alone and the responsibility belonged, thus, to the Captain, not the admiral commanding the squadron. A third version talked of a mistake being made with the orders 'Full Speed' and 'Stop' by the sailor in the engine room telegraph on the bridge. The mutual trust between the two navies dropped to its lowest level.

At 1102hrs, *Dartmouth*, 'outnumbered and outgunned' according to her log, left to sail south (**2**). The light cruiser *Bristol* followed and fire ceased at 1104hrs. At 1110hrs, the British cruisers reported sighting smoke from the north. They concluded it to be the Austro–Hungarian armoured cruisers from Cattaro. *Novara* was then 28,000yds away, i.e. out of sight, and the *Sankt Georg* group (at 18 knots) was still 45,000yds away. *Novara* slowed at 1115hrs and stopped five minutes later.

At 1115hrs, the Italian destroyer *Acerbi* (under LtCdr Guido Vannutelli) interpreted a flag signal by *Dartmouth* as 'Torpedo Attack' and charged, alone, at the Austro–Hungarian squadron (**3**). The Italian commander, observing the fire on *Dartmouth*, had concluded that the light cruiser was in real danger and needed help. At 1119hrs, at a range of 10,200yds, *Acerbi*'s 4in guns opened fire and the Austro–Hungarians replied at will. At 1122hrs, *Saïda*'s fourth funnel was hit, with modest damage and by 1124hrs, *Acerbi* was straddled. At 1125hrs, Vannutelli saw *Novara* immobilized and signalled this in plain text, repeating it at 1130hrs, as neither *Dartmouth* nor *Bristol* confirmed reading it. At 1130hrs, Acton, now informed, ordered the Allied squadron to turn north. The range was then 38,000yds. *Acerbi*, shadowing the enemy and firing slowly, received an order to retreat at 1136hrs. She obeyed one minute later.

Seven minutes before, the newly arrived Italian light scout *Racchia* and the destroyer *Impavido* (not shown) had opened fire with their bow chasers (respectively one 6in gun and one 4.7in) at 12,000yds. The distance decreased to about 7,000yds by 1205hrs when the warships from Cattaro came into sight. The British report stated they were 'a large two funnel and two masted cruiser seen with other smoke behind'. As the Austro–Hungarian armoured cruisers had three funnels, this report indicates a Radetzky-class battleship. The Italian version stated that there was only one big ship in sight. Nevertheless, by 1205hrs, the action was over as the newcomers' armour was invulnerable to Allied guns. Closing the day's action, *Dartmouth* was hit that afternoon by a torpedo launched by the German submarine UC 25.


Reinforcements led by armoured cruiser *Sankt Georg*, with destroyer *Warasdiner*, and four torpedo boats
Destroyers *Csepel* and *Balaton*, sailing independently
40,000m-plus
Raiding force of light cruisers *Novara*, *Helgoland*, and *Saïda*
8,000m–10,000m
11,000m
1
2
3
Mirabello
Marsala
Dartmouth
Bristol
1,000m
Acerbi
Schiaffino
Pilo
Mosto

The real danger for the Italian battlefleet in 1917 was not from foes, but from friends. After the defeat of Caporetto, RM intelligence discovered a clandestine shipment of rifles, Lewis guns and ammunition for use by the British sailors barracked on the old battleship *Queen* at Taranto. The plan was, if Italy surrendered, to scuttle the pre-dreadnought as a blockship in the middle of the passage between the *Mar Piccolo* and the *Mar Grande* and immobilize the rest of the Italian dreadnoughts. Italian forces reacted by not intercepting the weapons, so as not to arouse suspicion, but by cutting water to the *Queen* and surrounding her, step by step, with small barges before sending her to the large Ferrati dry-dock. When *Queen* left Taranto in January 1918 to return home, her four 12in guns had been removed to be mounted on the self-propelled pontoons *Cucco* and *Vodice* which, under the new names GM 191 and GM 192, defended Taranto in 1940–43.

1918

Northern Adriatic

NORTHERN ADRIATIC 1918			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES***
9 Feb	**Monitor** *Sir Thomas Picton* escorted by seven DDs and ten TBs	Day	**A–H Littoral front line**
10 Feb	**TB** 12PN, 13OS, 18PN; **MAS** 94, 95, 96	Night	Forcing Buccari, in the Gulf of Quarnaro. No target (fishing vessels) was hit
21 Mar	**Monitor** *Sir Thomas Picton* escorted by eight DDs and seven TBs	Day	**A–H Littoral front line**
5 Apr	DD *Uskoke*; TB Tb26	Night	A failed raid by a platoon party at Ancona. All the A–H sailors and their motor barge were captured
8 May	DD *Turul*, *Huszár II*, *Réka*, *Pandúr*	Day	A failed raid by a platoon party at Silvi Marina trying to sabotage the railway line
14 May	**Attack craft** *Grillo*	Night	Forcing Pola. The boat was stopped and destroyed by a scuttling charge from her crew
16 May	**MAS** 94, 95	Night	Failed endeavour to Force Trieste repulsed by GE
10 Jun	**MAS** 15, 21 vs BB *Tegetthoff, Szent István*; DD *Velebit*; TB 76T, 77T, 78T, 79T, 81T, 87F	Day	BB *Szent István* sunk
22 Jun	**TB** 3PN, 9PN, 10PN, 12PN, 40OS, 41OS, 42OS, 64OS, 65OS, 46OL, 48OL, 58OL	Night	**Punta Tagliamento** and **Caorle**
1 Jul	DD *Balaton, Csikós*; TB 83F, 88F vs **DD** *Missori, La Masa, Audace, Orsini, Acerbi, Sirtori, Stocco*	Night	Action off Caorle. *Balaton* (1), *Csikós* (1), 83F (3), 88F (1), *Stocco* (3), *Orsini* (s) damaged
2 Jul	**TB** PN3, 40PN, 64PN, 65PN, 66 PN, 15OS, 18OS, 48 OS. Minesweeping Force TB *Climene, Procione* and **GB** *Grado, Capitano Sauro*	Night	**A–H Littoral front line**
7 Jul	**TB** 3PN, 40PN, 65PN, 66PN, 48OS, 58OL	Night	Targets of opportunity between **Caorle** and **Cortellazzo** firing 320 shells

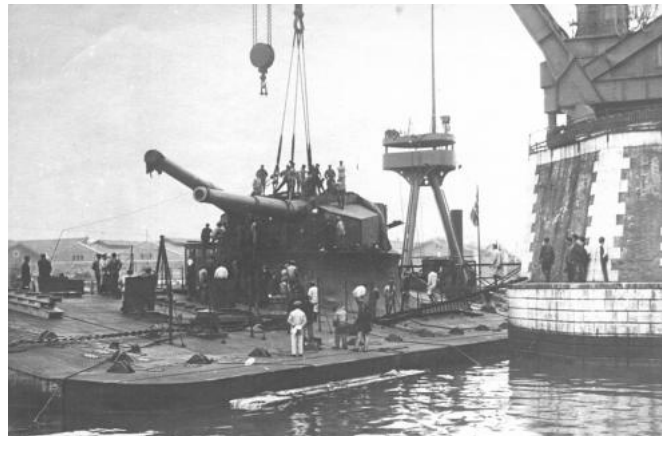
DATE	SHIPS INVOLVED*	DAY OR NIGHT ACTION	TARGETS AND CONSEQUENCES*
15 Sep	**TB** 3PN, 4PN, 65PN, 66PN; **MAS** 94, 95	Night	Landing of agents along the coast of Istria. Mission accomplished and renewed successfully on 16 September 1918. Other similar operations had been made during the previous years, but the relevance of this one, led by the then Lt Angelo Iachino, future commander of the Italian battlefleet 1940–43, had a bigger impact as the agent, Marquise Giuliana Benzoni, nicknamed the Italian 'Mata Hari', played a decisive role in passing information about future Czech–Yugoslavian plans.
17 Sep	**TB** 3PN, 4PN, 65PN, 6 PN; **MAS** 94, 95	Night	Successful recovery along the Istrian coast of the agents landed previously
31 Oct	**TB** 41PN, 64 PN, 56AS	Day	Targets of opportunity between **Caorle** and **Revedoli**
1 Nov	**Attack Craft** S2; EF **TB** 65PN, 66 PN; **MAS** 94, 95	Night	Forcing Pola. BB *Viribus Unitis* sunk
*Allied ships in bold ** Place names in bold indicate a bombardment action			

In 1918 the Italian light forces' activity in the Northern Adriatic was considerable: from classic night patrols to attack craft operations and Inshore Squadron missions.

The logistical support the RM had given the Italian Army during the early years of the conflict had been invaluable, when Italy's transport system hadn't been as efficient as Vienna's. For example, in 1915, the RM delivered 61,900 tons of supplies to the front line ferried by coastal steamers. In 1916, it was 524,956; in 1917, 769,500 tons; and in 1918, 1,381,900 tons. Equivalent Austro–Hungarian activity to the Italian front, Isonzo river at first, then Piave, began in spring 1916 with just two dozen small coastal vessels. The total coasters used slowly increased to about 180, but the tonnage of supplies delivered for the Habsburg Army remained low: 10,000 tons in 1916 and 1917, and about 50,000 in 1918.

Italian naval traffic remained unhindered in this area as a long series of dredging works had created an inshore network of channels unknown to the enemy, from Venice to Grado; Austria–Hungary's supply chain was not so fortunate, being harassed daily by aircraft and artillery pontoon fire and MAS boats at night. If little was shipped to the Austro–Hungarian Army through the lagoons, it was also because there was little to send as, since winter 1914–15, the Entente naval blockade had caused hardships at home.

After the bread riots at the Pola yard in January 1918, there was a mutiny at Cattaro on 1–3 February, including gunshots exchanged between the warships



The Italian self-propelled (3 knots) pontoon *Faà di Bruno* armed with a modified twin 15in turret developed during the second half of 1916 in anticipation of an improved post-Jutland version of the battleship *Caracciolo*. Renamed GM 194 in 1924, she served during World War II as a coastal defence floating battery at Genoa and, from 1943, Savona. Under the colours of the *Marina Repubblicana* (the Fascist Republic Navy), she damaged the destroyer USS *McLanahan* off San Remo on 11 February 1945.

of the Fast Squadron, some of them even raising the red banner following the example of the recent Bolshevik Revolution in Russia. Emperor Charles I removed Adm Njegovan from his office and Rear Adm Miklos Horthy de Nagybáya, a distinguished officer from Hungary, become the new commander-in-chief of the k.u.k. Kriegsmarine on 8 March 1918.

The war was reaching its climax. In November 1917, Vienna's overtures towards the British and the French began a new round. Following a meeting with King Victor Emmanuele and Prime Minister Lloyd George at Peschiera, Gen Jan Smuts – now a member of the Imperial War Cabinet – met with Vienna's envoys in Switzerland. The two sides differed radically on their recollections of what was said. Austro–Hungarian documents record Smuts as saying that after Caporetto, the Treaty of London no longer bound Britain, while France would follow any British indications. Vienna had asked again for a general European peace, but what was proposed in return was, as before, Vienna joining the war against Germany. After the war, Gen Smuts, faced with documentation from the former enemy, claimed that he had merely put out feelers, while stating that Vienna would have had to pay, anyway, a price to Italy – the transfer of Trentino.

On 12 April 1918, the French Prime Minister Georges Clemenceau denounced the whole story in the press and any chance for an Austro–Hungarian separate peace with the Entente was over. It was France's first step towards a future partnership with Rome, to face the worrying and increasing British appetite in the Middle East where the British had designs despite the Anglo–French Sykes–Picot agreement of 16 May 1916 which had provisionally divided the Ottoman Empire between London and Paris. Now it was just a matter of ability and brute force, at sea and on land.

Given the effect on Austro–Hungarian morale of Italian harbour-forcing actions since the first day of the war, and their continual introduction of new devices, Admiral Horthy authorized a couple of night raids, by destroyers and torpedo boats, to cross the Adriatic and land parties to seize examples of the weapons involved. The target of the first mission was one of the mysterious MASs. Italian propaganda had described these as extremely fast boats (in fact they could only do 21 knots) and the k.u.k. Kriegsmarine believed them to be armoured, as many times they had survived barrage fire, apparently unscathed. The attempted operation at Ancona ended with the seizure of the raiders; and a follow-up mission faced the same fate.

Ancona, spring 1918. 250-ton Italian 'F' boats and five 'A'-class midgets laid up. The Italian and Allied boats wore down the Austro–Hungarian destroyer and torpedo boat force as the Allied threat in the Northern Adriatic required a large number of fast escort vessels for ASW and minesweeping roles to combat it. This compromised the number of capital ships available.

Meanwhile Horthy paid off some old and worn-out warships, the two armoured cruisers *Sankt Georg* and *Kaiser Charles 1 VI* based at

Cattaro included. Their personnel were needed elsewhere and, having rejected any further attempts at Cortellazzo, he conceived a new plan. A raid by almost all the Navy in commission: the four dreadnoughts, the three pre-dreadnoughts of the Radetzky class, the three most recent coastal pre-dreadnoughts (lacking anything better), the four scouts, 13 destroyers and 32 torpedo boats, to engage the *Dispositivo* protecting the Otranto Barrage. The idea was to first encounter the Allied light forces, and then for the dreadnoughts to fight the Italian armoured cruisers sortieing from Brindisi and Valona, but to turn for Pola before the Italian dreadnought squadron from Taranto could arrive. If – a big if – the k.u.k. Kriegsmarine main battleforce could arrive off Otranto unnoticed, after steaming for 350 miles and 32 hours, the bigger guns and numbers would be on the Austro–Hungarian side. In April, three of the four pre-dreadnoughts of the Italian Regina Elena class had been notoriously retired to Taranto with their crews depleted, due to shortages of coal. Only *Napoli* remained at Brindisi with a pair of armoured cruisers, the British light cruisers and the RM scouts.

It was a very complicated plan (the Austro–Hungarian force was sub-divided into nine squadrons) with a rigid schedule and timetable. At dawn on 11 June, the intention was to gain not a great, naval decisive victory (as the stronger Italian squadron based at Taranto, 70 miles away from the Strait, and the French battlefleet at Corfu, 100 miles away, would remain ready for action), but a morale booster before the next, and last, army offensive against the Piave line. This would be a do-or-die general assault by 59 Austro–Hungarian divisions (a large number of reinforcements had arrived from the Eastern Front after the Peace of Brest-Litovsk), scheduled for 15 June.

It was a blunder. On 10 June 1918, at dawn off Premuda Island, MAS 15, under LtCdr Luigi Rizzo (promoted since his actions with the *Wien*), sank the dreadnought *Szent István*. The torpedoes of his section mate, MAS 21, missed her sister ship *Tegetthoff* due to defects in the weapons. That day the Italian Navy gained a double advantage. The first was the payoff of thousands of hours of constant sea patrols (Italian torpedo boats alone totalled 28,177 missions during World War I) and the second was confirmation of the poor state of the enemy fleet's training. *Szent István*, for instance, spent 94.4 per cent of her life moored at Pola, the remainder doing fire-training exercises in the Channel of Fasana, 45 minutes from home. The efficiency of her lookouts and damage-control parties were, thus, debatable. The escort provided by the ten destroyers and

The *esploratore* (categorised in 1921 as a *cacciatorpediniere*, i.e. destroyer) *Alessandro Poerio*. Three warships of this class were ordered in late 1912 as high-seas escorts for the newly arrived German battlecruiser, *Goeben*, stationed in the Mediterranean which could sortie into the Western Mediterranean. Italian and Austro-Hungarian destroyers could not cover the distance required. These destroyers were based on a larger (1,028 tons) version of the 550-ton Italian-made Portuguese destroyer *Liz* (from March 1915 HMS *Arno*).

torpedo boats did not spot the MAS boats, nor was it effective in chasing them down after the action, despite the fact that the Italian craft were actually slower than the torpedo boats. The number of Austro–Hungarian escort ships had been considered too few since mid-1916 and, by now, most were worn out or out of service after years spent defending convoys and minesweeping.

Dominated, like any other sailor of the fleet, by the nightmare of Italian espionage (in 1910 9.8 per cent of the k.u.k. Kriegsmarine's officers and 18.3 per cent of its NCOs and sailors were Italians, compared to the 3 per cent of Italian-language inhabitants within its empire), Horthy give up any plan of returning to Pola. A few days later, the Austro–Hungarian press confirmed what had happened and what had been planned as a morale booster for the hungry Habsburg Army and empire became a tragedy.

On the ground, the last Imperial Army offensive in Italy began on 15 June and after ten days was repulsed. The remaining three British divisions lived up to their reputation as 'Tommies-the-latecomers', proving to be good trench companions.

SINKING OF *SZENT ISTVÁN*

On the evening of 9 June 1918, two battleships, *Tegetthoff* and *Szent István*, sailed from Pola escorted by the destroyer *Velebit* and six torpedo boats, bound for the Otranto Barrage. There was no room for mistakes, but the first was made even before leaving port. The battleships were ordered not to embark the high-quality available Cardiff coal, fearing Italian HUMINT intelligence would note the refuelling and the reason for it. Instead, they would burn the inferior Polish coal used for daily life in the harbour. It delayed their sailing, and the squadron emitted a huge cloud of smoke which was sighted at 0315hrs starboard aft, by two MAS boats returning at dawn after an ordinary night's patrol.

LtCdr Luigi Rizzo, commander of the MAS section, reversed course to attack what he first thought were destroyers hunting for him, believing the lookout station on Gruiza Island, less than nine miles away, may have heard his petrol engines despite their silencers.

The MAS approached the enemy at low speed (less than 8 knots) to avoid creating bow waves. Rizzo soon realised that there were two capital ships surrounded by destroyers and torpedo boats. To be able to launch at short range (the ideal was 500m), he decided to cross the 'T' of the destroyers and torpedo boats escorting the first battleship. For this manoeuvre, the MAS increased speed to first 9 and then 12 knots, crossing the 'T' of the torpedo boats unseen at 100m range.

At 0325hrs, MAS 15's two torpedoes were launched about 300m from the target (running at 1.5m depth as they were optimized against destroyer-size warships), and hit the *Szent István*, which capsized and sank three hours later. The torpedo boat to the port side of MAS 15 made a 360-degree turn to chase, and opened fire with the bow chaser at about 150m. The shooting went long. Rizzo forbade his machine gunner from replying and dropped two depth charges. Only the second exploded, near the torpedo boat's bow, which then turned 90 degrees. MAS 15 increased speed to 20 knots (her flank speed) and the torpedo boat soon disappeared. MAS 21 followed MAS 15 and made the same attack against *Tegetthoff*, but her torpedoes were both defective.

Obsessed by his fear of treason and Italian intelligence, Adm Horty cancelled the operation. The irony was, however, that the Italians had not previously been aware of the Austrian sortie and, as the MAS boats had no wireless set, the news was first heard by torpedo boats (15 OS and 18 OS) which they met as scheduled at 0500hrs to tow them back to Ancona. The torpedo boats broadcast the news to Ancona then and, when the MAS arrived at 0700hrs, they received a heroes' welcome.

Torpedo boat 78
Tegetthoff
Torpedo boat 89
Szent István
Torpedo boat 79
Torpedo boat 81
Velebit
Torpedo boat 76
Torpedo boat 77
MAS-15 and MAS-21

The next few months of the war witnessed the slow decline of the k.u.k. Kriegsmarine in the Northern Adriatic. Records show, in addition to the actions reported in the table above, the rearmament, with two 5.9in guns, of the former Italian self-propelled pontoon *Padus*. She had been stranded, on 7 November 1917, during the storms which characterized the retreat after Caporetto. This lone former river steamer was delivered in May to the Imperial Army as, after four years of war, the k.u.k. Kriegsmarine was now suffering a serious manpower crisis. She twice shelled the beaches of Lignano during the last offensive on the Piave and was damaged, on 2 July, by RM flying boats. Paid off, she was recovered by the Italians at the end of the war, and returned to her usual work along the Po and Ticino rivers.

Southern Adriatic

SOUTHERN ADRIATIC 1918			
DATE	**SHIPS INVOLVED***	**DAY OR NIGHT ACTION**	**TARGETS AND CONSEQUENCES****
22 Apr	DD *Csepel*, *Uzsok*, *Dukla*, *Lika* (*II*), *Triglav* (*II*) vs DD *Jackal*, *Hornet*, *Torrens*, *Cimeterre*.	Night	Strait of Otranto. *Hornet* (3) and *Jackal* (1) damaged
13 May	MAS 99, 100 vs DD *Dukla*; TB 84, 98 escorting a convoy	Night	The troopship *Bregenz* sunk; this was the first successful MTB high-sea action in history
15 May	MAS boats	Night	Failed attack against the steamer *Szent László*
7 Jul	**Monitor** *Earl of Peterborough*, *Sir Thomas Picton* escorted by six DDs and six TBs	Day	**A–H Littoral front line in Albania** covering a raid by *Arditi* (shock troops) against Punta Semana
19 Jul	MAS 97, 101	Night	Failed attempt to force Antivari
5 Sep	**LS** *Aquila*, *Nibbio*, *Sparviero*; **TB** 6PN,12PN vs, TB 86, 19, 38	Day	A brief engagement in the Gulf of Drin. TB 86 suffers splinter damage
5 Sep	MAS 100, 218	Night	Failed forcing of Durazzo. The operation was renewed on 9 September, with no success as the boats were detected.
1 Oct	MAS 100, 218	Night	Failed forcing of Durazzo, as the boats were sighted by the enemy.
2 Oct	SF **AC** *San Giorgio*, *San Marco*, *Pisa*; **CL** *Lowestoft*, *Dartmouth*, *Weymouth*; **DD** *Nereide*, *Ruby*, *Nymphe*, *Camaeleon*, *Acheron*, *Goshawk*, *Jackal*, *Tigress*; **TB** 8PN, 10PN, 11PN, 35PN, 36PN, 37PN, 38PN, 42PN, 67PN; MAS 92, 97, 98, 102, 202 and 210 EF **BB** *Dante*; **CL** *Glasgow*, *Gloucester*; Scout *Marsala*; **LS** *Aquila*, *Nibbio*, *Sparviero*, *Racchia*, *Riboty*, *Rossarol*, *Pepe*, *Poerio*; **DD** *Nievo*, *Schiaffino*, *Swan*, *Warrego*, *Acorn*, *Lapwing*, *Tribune*, *Shark*, *Badger*, *Fury*; 11 US Navy Sub Chasers	Day	**Durazzo**. DDs *Scharfschütze* and *Dinara* and TB 87 damaged; A–H steamers *Stambul* sunk and *Hercegovina* damaged by gunfire. In daylight MAS boats forced the harbour sinking the steamer *Graz*. MAS 98 damaged by splinters. HMS *Weymouth* torpedoed by the A–H submarine U 31.
21 Oct	SF **TB** 12PN, 42PN, 57AS, 58OL EF **LS** *Aquila*, *Nibbio*, *Sparviero*, *Mirabello*, *Racchia*, *Riboty*	Day	**San Giovanni di Medua**
*Allied ships in bold ** Place names in bold indicate a bombardment action			

In 1918, the Southern Adriatic was an Allied area. The k.u.k. Kriegsmarine made only two more attempts against the Otranto Barrage, the first on 16 January with no sightings, and the other on the night of 22–23 April. The Habsburg Navy scout force was in bad condition. The sea lanes between Italy and Albania were secured from surface threat from Cattaro, and the *Dispositivo*, guarded by the battlefleet, was untouched. Italian warships and Royal Navy monitors acted, in the meantime, as an inshore force while a large Italian cavalry raid, begun in Albania on 6 July, was followed by an Austro–Hungarian Army counter-offensive, the last flick of the tail of the old Habsburg Empire. The Austro–Hungarian retreat from Albania was ordered on 28 September as a consequence of the collapse of fighting and the armistice, signed the next day, between the Entente and the hungry and exhausted Bulgarian Army. The Central Powers' new Balkan front had to be organized around Cattaro and the Danube with the aid of the approaching winter. The evacuation from Durazzo was a promising target and Thaon di Revel ordered a bombardment from the sea of the harbour. He was present aboard *Dante* during the action, on 2 October, with the aim of witnessing an Italian battlefleet dreadnought mission in the Adriatic and of bolstering the motivation of the RM.

Italian landings, a small brigade force with a vanguard of sailors from the Grado battalion of the Reggimento Marina, were made in Albania at Durazzo (14 October), San Giovanni di Medua (30 October), Alessio (1 November) and Scutari (2 November). In Montenegro, forces landed at Dulcigno (3 November) and Antivari (4 November).

The naval air war, along the Adriatic, confirmed the Allies' superiority, both numerically and in aircraft quality. In 1918, RM planes made 1,382 bombing sorties against 145 made by Austro–Hungarian Navy planes. As Nelson said, 'Numbers only can annihilate.'

DURAZZO, 2 OCTOBER 1918

The bombardment of Durazzo was mainly a demonstration of power. In the foreground, the Italian armoured cruisers *San Giorgio* and *Pisa* shell the harbour with *San Marco* (not shown). They are closely escorted by eight torpedo boats of the PN class, and by four British destroyers, a pair on either side. Three British light cruisers will follow the Italian cruisers and bombard Durazzo in turn, while the covering force (Adm Vittorio Molà) includes the battleship *Dante*. Far inshore, MAS boats have entered the port, but the k.u.k. Kriegsmarine ships evade their torpedo attacks. A freighter is burning in the harbour and there are some fires in the town and in the docks area.

The light cruiser HMS *Weymouth* suffered damage from a torpedo fired by the Austro–Hungarian submarine U 31 during this action, confirmation that the Austro–Hungarian strategy of naval sea denial in warfare was not decisive, but could be dangerous; also that the submarine, until the advent of the effective Royal Navy Type 124 ASDIC (sonar) by 1934, still had its place. It was a lesson the Italian Navy took on board. In 1919, Italian naval doctrine based itself substantially on Germany's expertise in U-boat warfare and drew up plans to invest in torpedo bombers and a new generation of submarines once there was an increase to its budget

MARITIME AIR ACTIONS, ADRIATIC, 1918	
18 Jan	At Durazzo, a bomb damaged the freighter *Balaton*.
27 Feb	During a night raid against Venice, the light Italian scout *Aquila* and the destroyer *Acerbi* were hit.
18 Mar	The steamer *Metkovich* was sunk by Italian aircraft at San Giovanni di Medua.
27 May	Torpedo boat 94F was hit by a bomb at Durazzo.
9 Jun	At Brindisi, the scout *Bixio* suffered a bombing near-miss with slight damage. That same day, at Cattaro, the coastal pre-dreadnought *Ferdinand Max* also had a near-miss and was damaged by a 66mm AA shell that penetrated both the weather deck and the gun deck.
13 Jun	The destroyer *Csikós* and the torpedo boat 58T were hit by bombs at Cattaro. Two German submarines recorded slight damage. On 18 June at Cattaro, it was the turn of the steamer *Corvin* to be hit by a bomb.
26 Jun	The Austro–Hungarian torpedo boat 94F was damaged at sea by a floatplane.
17 Jul – night	Italian bombers hit the pre-dreadnought coastal battleship *Babensberg*; the bomb pierced two decks. The destroyer *Huszár*, TB T38 and the Admiralty yacht *Lacroma* were damaged too.
21 Jul	At Cattaro, the protected cruiser *Kaiser Franz Joseph I*, used since 1916 as a guard ship, was damaged, as was TB T99 on 26 July.
2 Aug	Italian bombers hit the troopship *Kassa* at Cattaro; burned out, she recorded 169 dead and 126 men wounded and was not repaired. The destroyer *Dukla* was damaged.
20 Aug	Again at Cattaro, the coastal battleship *Monarch*, by now a depot ship for the German submariners, was damaged by a bomb.
21 Aug	The tugboat *Trieste* was sunk, in Venice, in a night raid.
24 Aug	The torpedo boat 99M was seriously damaged by bombs dropped by British DH 4 bombers.
6 Sep	British bombers over the Bay of Cattaro damaged (three near-misses) the coastal battleship *Monarch*.
11 Sep	At San Giovanni di Medua, bombs damaged the steamers *László* and *Zriny*.
15 Sep	The auxiliary vessel *Dobrdo* was damaged at Pola.
2 Oct	British bombers damaged the sailing ship *Cavalna Rina* at Durazzo during the naval bombardment of the town.

THE END OF THE WAR

German and Austro–Hungarian appeals in September and October, for a peace restoring the status quo, were refused on a regular basis by the United States (the major partner of the Western Powers from June 1918 until the midterm elections lost by President Wilson on 5 November 1918). On 16 October, Emperor Charles I issued a People's Manifesto, creating a federal empire, including (with Austria and Hungary) the brand-new crown of a future South Slav State of Croatia, Dalmatia and Bosnia–Herzegovina. This would be led by a South Slav National Council at Zagreb.

On 24 October the battle of Vittorio Veneto began: 51 Italian divisions, three British, two French, one Czechoslovakian (formed and armed in Italy) with 7,720 guns and about 600 aircraft against 57 of the Imperial Army (another division was garrisoning the troublesome Vienna) with 6,145 guns and 564 aircraft. The Imperial troops missed the 60 battalions and 900 guns (a strength equivalent to six divisions) which were deployed in Istria and Dalmatia, guarding against a feared invasion from the sea, which the k.u.k. Kriegsmarine would be unable to repel.

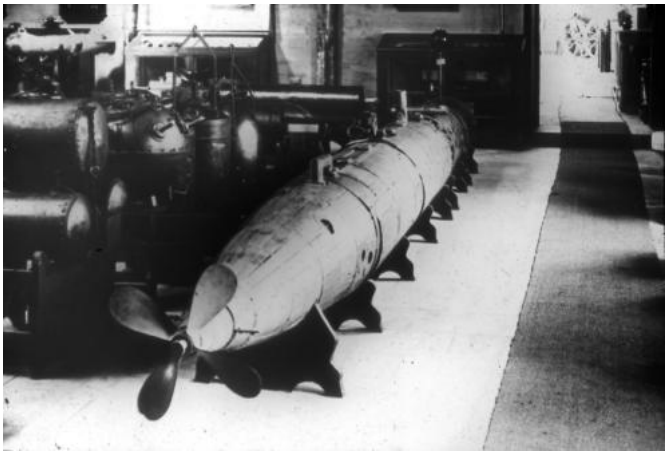
On 26 October three Austro–Hungarian divisions mutinied. The next day two other ones followed; this time they were formed by German-speaking troops who refused to counter-attack under the overwhelming Italian

artillery fire (including from the Inshore Squadron) which had dominated the battlefield since mid-June. On 28 October, 33 of the Austro–Hungarian divisions on the Italian front were considered mutinous. The Army had been the last hope of Emperor Charles I to grasp a satisfactory compromise: to leave, within 12 months, the Italian-occupied territories and to cease fighting after a military-only armistice. But now, with the collapse of his last forces, everything was lost. At Vittorio Veneto the battlefront had been broken in two, between the Alps and the plain, and the Imperial Army was put to flight. More than 5,000 field guns were seized. The k.u.k. Kriegsmarine recorded, after two nervous days, mutinies on 28 October and the battlefleet became useless. On 29 October, the Habsburg Army sent an envoy to the front line, to propose the passage of a mission in view of a request of armistice. On 31 October, Emperor Charles I, needing the support of the new Slav State, presented the k.u.k. Kriegsmarine as a supplementary gift to the Zagreb Council after the delivery to them of Fiume (a Hungarian town from 1446) and Dalmatia (Austrian territory since 1797). This largesse was accepted and the formal passage of the Navy, after a hasty ceremony at Pola, was concluded at Cattaro the next morning, at 0800hrs. The Austro–Hungarian armistice commission (passing beyond the Italian lines on the night of 31 October–1 November) was ordered not to inform the Italians about these exchanges. On the morning of 31 October, the Italians activated a long-planned craft attack operation using a new device: a self-propelled mine powered by compressed air, which sunk the dreadnought *Viribus Unitis* at Pola on 1 November at 6.30am.

The model of the hull of the old pre-dreadnought battleship *Re Umberto*. She was given a concrete bulge and was destined to ram her way through Pola's barrages, opening the way for a dozen MAS boats. Equipped with special saws and cutters and a 240mm (9.4in) mortar battery (*bombarde*), her one-way mission was scheduled for the new moon (3–10 November 1918), but the war was over before then.

On the afternoon of 1 November, the Imperial Government in Vienna and *Generaloberst* Arthur Freiherr Arz von Straußenburg, commander-in-chief of the Habsburg Army, were furious to learn that the Yugoslavian autonomous state, within the Imperial framework and with the borders of 1914, had just declared itself to be independent and neutral, but no retaliation was possible as both the Army and the Navy were powerless.

During that same day, 1 November, at 0900hrs, the Austro–Hungarian armistice commission received the terms of the armistice at Villa Giusti, near Padua, agreed on by the Allies and the United States. It was a true capitulation as it allowed Italy and the Allies to use, at will, the communication and transmission systems of the empire which were made available for planned operations against Germany. It was exactly what Kaiser Wilhelm had asked Emperor Charles not to do, and on 29 October the latter had formally promised Germany that Austria–Hungary would be a neutral buffer state. As a consequence of the débâcle in Italy, however, there was no chance of refusing the Allies' terms and on the night of 2–3 November, after a lively meeting



The second version of the self-propelled semi-submersible attack mine, craft 'S', nicknamed Mignatta (*Leech*), now in the Museo Tecnico Navale of La Spezia. On 1 November 1918, a similar craft sank the battleship *Viribus Unitis* inside Pola harbour.

at the royal palace of Schönbrunn, the armistice was accepted. It was signed on the afternoon of the 3rd and came into force the next day. The 182,000 Austro–Hungarian prisoners taken on 3–4 November were liberated during the following days and supplied with food to reach their homes; the 246,000 seized between 24 October and 3 November were more than enough for the logistics of the Italian Army, not to mention the 168,898 already behind the wire during the previous three years.

Two German divisions entered Austria on 4 November to use the Austrian territory as a bulwark, but the situation was desperate. No German Army central reserve was available. The Balkan–Danube line was still considered defensible during the winter, and along the Western Front the Allies' Hundred Days offensive had not yet caused a breakthrough in the German line-up, but now Bavaria was open to an Allied expeditionary force (29 Italian, three British and two French divisions under the orders of the Duke of Aosta, another cousin of the king and third in line to the throne). On 5 November morning, the German government admitted that it was necessary to seek an armistice. The envoys sent by Berlin were admitted beyond the French lines on 8 November, and drove to Compiègne, where the armistice was signed on 11 November at 5.00am, taking effect at 11.00am.

The Adriatic naval war was not, however, over and some 'battles' were still being fought.

EMERGENCY EXIT

Britain, a traditional ally of the Habsburgs of Austria since the Glorious Revolution and the Nine Years' War, had little interest in a total defeat of Vienna. A Plan B had already been conceived in autumn 1914: in the case of an Austro–Hungarian defeat, the Italian presence in the Adriatic could again be counterbalanced by a new Czech–Yugoslavian state linked by a corridor through Hungary; the k.u.k. Kriegsmarine would thus continue under new colours, performing its traditional role in those waters.

Italian intelligence had known about this programme since the beginning, as both Tomáš Masaryk and Edvard Beneš, the fathers of Czechoslovakian independence, had passed through Italy in autumn 1914 on their journey to London; their luggage was discretely searched, hotel rooms bugged and both of them were attended by waiters and chauffeurs fluent in Czech. The scheme was also compromised by RM intelligence recovering, in Istria, in September 1918, a Navy agent, the marquise Giuliana Benzoni, the fiancée of the Slovak independence

leader Milan Rastislav Štefánik. She was able to confirm their worse suspicions about the Czech–Yugoslavian plans.

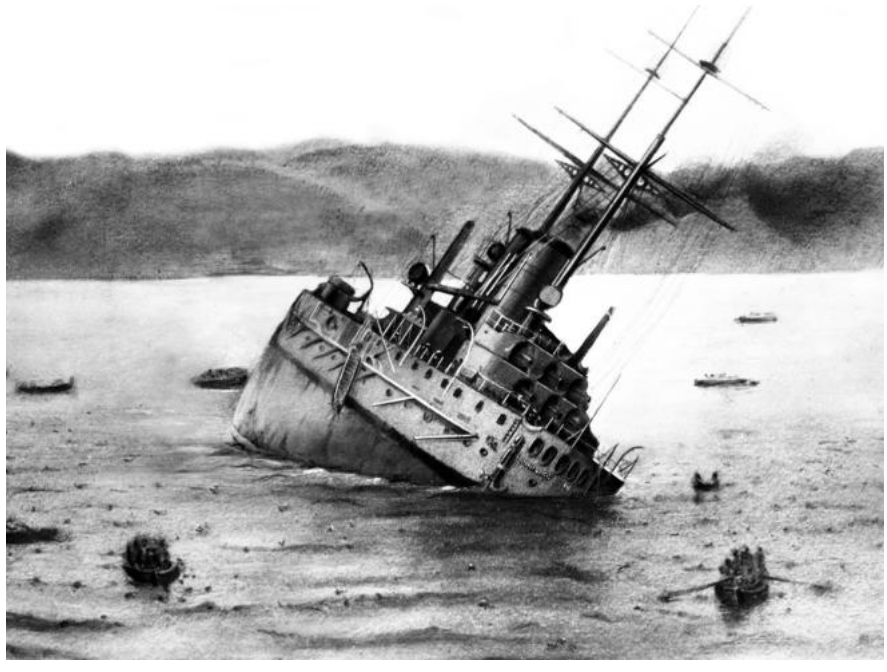
The armistice clauses signed on 3 November stated that Austro–Hungarian dreadnoughts, plus three scouts, nine destroyers and 12 torpedo boats, had to be delivered to Italy in the name of the Allies and the United States. On the same day, the British naval command in Malta was informed by wireless plain language message, broadcast by a Yugoslavian committee at Cattaro, that the battlefleet should be able to sail peacefully from Pola and Cattaro to Corfu. However the Yugoslavian State of Slovenes, Croats and Serbs created in October 1918 by Emperor Charles's decree, was never recognized by the Entente and the United States except for the Kingdom of Serbia. It was a confusing situation, and from late October most of the crews abandoned their warships, where they lay, to travel home, from Poland to Transylvania, by any means possible. No warship weighed anchor for the Ionian Islands except for the torpedo boat 77T which arrived too late, on 6 November, asking at once for the '*Britische Kommission*'.

Fiume, 1919. The French destroyer *Cimeterre* has just smashed her bow against a mole, and is attracting a crowd. A dozen French destroyers joined the Italians at Brindisi in June 1915. Their number declined and at the end of winter 1917–18, they were transferred to Corfu. The French destroyers' turbines from that generation suffered many defects.

Meanwhile, between 3 and 15 November, the RM occupied the Dalmatian and Quarnaro Islands while a destroyer flotilla arrived at Trieste on 4 November, a few hours before the armistice entered into force, welcomed by a huge crowd and some isolated shots from the roofs.

On 5 November, Adm Cagni entered Pola aboard the old battleship *Saint Bon*. Her sister ship *Emanuele Filiberto* arrived at Fiume the next day. Cagni liberated the two swimmers who had sunk the battleship *Viribus Unitis* (Maj Raffaele Rossetti, Navy Engineering Corps, and Lt Raffaele Paolucci, Medical Corps), raised the Italian flag on the ships in the base and occupied the forts and the batteries of the town with a battalion of sailors. On 10 November, Cagni let the two pre-dreadnoughts *Radetzky* and *Zrinyi* sail, with two torpedo boats, for Spalato (Split) with the few hundred sailors Zagreb had been able to collect to man them. They were transferred to the custody of the US Navy with the commanders of wooden subchasers assuming responsibility for them, but were soon abandoned by their makeshift and understrength crews before being turned over to the RM in 1920. The two by-now rusty pre-dreadnoughts were towed back to Pola and scrapped in 1920–21.

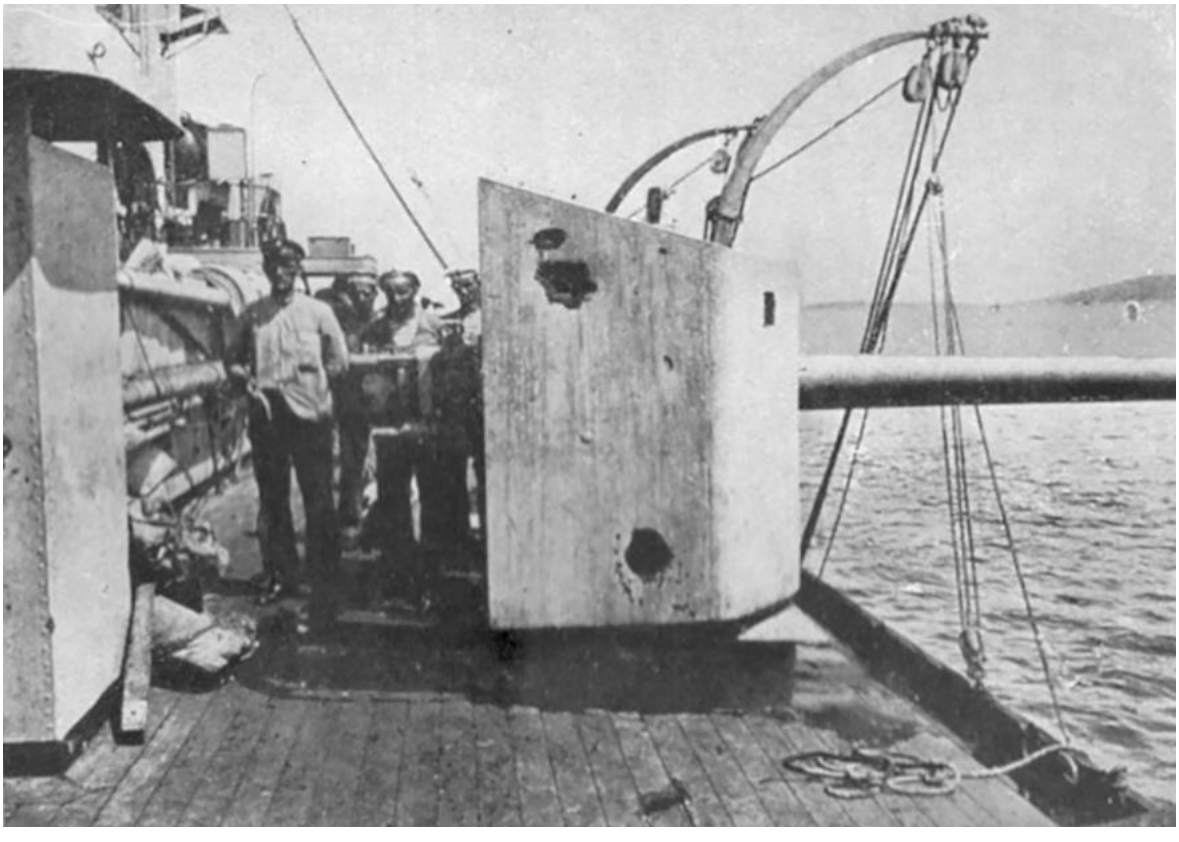
The dreadnoughts *Tegetthoff* and *Prinz Eugen* remained in Italian custody. On 11 November, the British asked for their flag to be raised on them as the Royal Navy considered them to be British prizes. The argument over this lasted until late November and the compromise finally adopted by both Navies was to



A heavily retouched photo of the sinking of *Viribus Unitis*. The original photographic plate, now in the Museo Tecnico Navale of La Spezia, confirms the photo was taken on board the battleship *Tegetthoff* on 1 November 1918, 6.30am (a foggy morning).

raise the Italian and British flags together. A French request to add the *couleurs françaises* to the dressing was politely refused. The withdrawal of the French destroyers from the Adriatic in spring 1918 had been a bad move and by now Paris' influence in the Adriatic Sea was negligible. The final decision, made on 1 December 1918, was not to raise any flag. Two days before, the Allies had agreed to Italian requests to disembark the last few sailors of the warships at Cattaro too, and to haul down the flag of the South Slav State of Slovenia, Croatia, Dalmatia and Bosnia–Herzegovina.

After 15 November 1918, all movements of what had been the k.u.k. Kriegsmarine were carried out by Italian crews. The Treaty of Saint-Germain-en-Laye agreeing peace with Austria was signed on 10 September 1919, after which *Prinz Eugen* was towed to Toulon and sunk as a target on 28 June 1922. Italy was given *Tegetthoff*, but delayed scrapping her until winter 1924–25. A plan was made, in 1919, to raise the *Viribus Unitis* (which was not included in the treaty) to repair her, but this didn't happen and the ship was broken up, underwater, one piece at a time during the 1920s. The pre-dreadnought *Erzherzog Franz Ferdinand* of the Radetzky class was sent, with *Tegetthoff*, to Venice on 24 March 1919. The RM rated her as a coastal battleship like the old Regina Elenas which were decommissioned between 1923 and 1927. The Italians' request to commission *Tegetthoff* and *Erzherzog Franz Ferdinand* was not accepted at Versailles in 1919 and the last former k.u.k. Kriegsmarine pre-dreadnought remained in limbo until she was scrapped in 1926. The scouts *Saïda* and *Helgoland* become the Italian '*esploratori*' *Venezia* and *Brindisi*. The scout *Novara* was re-named *Thionville* in the French Navy.



15 May 1917, post-battle damage to the Austro–Hungarian scout *Novara*. The Cattaro fast cruiser squadron repaired the damage sustained quickly, however the scout force was crippled by wear and tear between 1915 and 1918 due to the lack of maintenance facilities in southern Dalmatia.

The Serbian Kingdom (internationally recognized as The Kingdom of Serbs, Croats and Slovenes after the Treaty of Saint-Germain, and as Yugoslavia in 1929) had asked for a minimum of four scouts, 17 destroyers, 27 recent 250-ton torpedo boats and 20 completed submarines plus 17 under construction. In March 1921 it received eight torpedo boats and some old auxiliary vessels, all of them in very poor condition. Disappointed, Belgrade asked Prague to use Czech money to buy the so-called 'Wrangel Fleet' of White Russian warships interned at Bizerte in December 1920. The chosen ships were the dreadnought battleship *General Alekseyev*, the floatplane carrier *Almaz*, six destroyers and four submarines. Paris, however, careful not to provoke Rome, did not encourage this transaction and in August 1922 Prague abolished the Secretariat for the Navy, created with great hopes in November 1918.

The plans, supported by members of the British establishment, for a corridor through Hungary and Austria (a strip of land occupied temporarily, not by chance, by the Italians) to unite the Czech Republic and the Kingdom of Belgrade in a single confederation, were dismissed in November 1921, when Vienna invaded (with Italian support) the Banate of Leitha, a short-lived small state between Austria and Hungary actually formed by the potential corridor. During these Ruritanian adventures, British river gunboats and Italian torpedo

boats employed dirty tricks against one another on the Danube River, including two attempts by Britain to recover the Hungarian throne for the Austrian Emperor Charles I, as the declaration by which he renounced his participation in the affairs of state applied to Austria only.

CONCLUSION

The Adriatic is a narrow sea, 120 miles wide, similar to the Dover Strait and the Channel. Between 1915 and 1918, 24 actions were fought there (21 by the British and three by the French). The Italian Navy fought 48 actions in the Adriatic, not considering the shore bombardments and the daily operations of the armed pontoons.

During these surface actions the k.u.k. Kriegsmarine lost two dreadnoughts, one coastal pre-dreadnought, two destroyers and two armed motor boats. The RM lost two destroyers, while 46 k.u.k. Kriegsmarine warships were damaged: two coastal pre-dreadnoughts, ten scouts, 24 destroyers, eight torpedo boats, one guard ship and one armed motor boat. Some of these warships, for example scouts, were hit on more than one occasion.

During the same actions, the Allies had 22 warships damaged: two (British) light cruisers, one Italian scout, 12 light scouts and destroyers (two French, two British and eight Italian), four torpedo boats and three MAS boats (all of them Italian). The direct hits scored were 53 against Austro–Hungarian ships

A small Italian Navy pontoon, not self-propelled, of the *Orso* (bear) class, armed with one 6in gun, in the Lagoon of Grado. It was a hard life only people accustomed to riverine work could endure.

(ten on the French record, six on the British and 37 by the Italians) compared to 24 direct hits sustained by the Allied warships (six against French vessels, five on Royal Navy ones and 13 on Italian warships). The total number of Austro–Hungarian warships of any type engaged between 24 May 1915 and 4 November 1918 during the surface actions was 144, compared to the 149 Allied ships involved. From the strategic and tactical point of view, the Entente could therefore claim a 2-to-1 ratio in its favour in terms of its effectiveness.

Mine warfare was dominated by surface vessels except for the 150 laid by the Italian submarines X1 and X2 and a further 240 by HMS E 46. Italy laid 12,293 mines in the Adriatic, while 5,496 were laid by Austria–Hungary (many among them were Italian, recovered before the RM introduced booby traps). Beyond the loss on 29 December 1915 of the destroyers *Lika* and *Triglav* (noted in the surface actions table earlier), Italian mines sank the steamers *Goritia* (24 May 1915) and *Pozsony* (19 February 1916), the DD *Wildfang* (4 June 1917) and the steamers *Adelsberg* (20 June 1916), *Carlo* (16 February 1918), *Linz* (19 March 1918) and *Gorizia* (20 August 1918). The following Austro–Hungarian ships were also damaged:

K.U.K. KRIEGSMARINE MINE DAMAGE	
TB 60T	4 January 1916
TB 22	3 March 1916
TB 64F	1 June 1916
Steamer *Gilda*	23 June 1916
Tug *Elöre*	29 June 1916
Minelayer *Salamander*	9 August 1916
TB 52	29 September 1916
Steamer *Árpàd*	19 January 1917
TB 2	30 July 1917
TB T7	11 December 1917
Auxiliary vessel *Novi*	18 January 1918
Steamer *Giulia* (to an Austro–Hungarian mine)	3 May 1918
Submarine U 10 (raised, but not repaired)	9 July 1918
TB 89	16 August 1918
Steamer *Marina*	21 September 1918
Hospital ship *Oceania* (Austro–Hungarian mine)	4 October 1918
Steamer *Frankopan*	1 November 1918

The Italian losses to mines included the pre-dreadnought *Regina Margherita* on 16 November 1916 and the destroyer *Intrepido* (4 December 1915), both to German mines laid by submarines, the torpedo boats 36PN (10 November 1915) and 17OS (sunk by a mine of her own exploding on deck during a minelaying operation) and the submarines Jalea (17 August 1915) and W4 (4 August 1917). The French Navy lost the destroyers *Dague* (24 February 1915) and *Boutefeu* (15 May 1917, to a German mine), and

the Royal Navy the HB 3 boat, sunk on 15 July 1916. The Italian light scout *Rossarol* was sunk by a drifting mine on 16 November 1918. This was always a danger in the Northern Adriatic as moorings were often broken due to bad weather.

ANALYSIS

The strategy conceived by Thaon di Revel for the Italian battlefleet was clear: calculated risk, refusing the action-at-any-cost principle. Goals had to be worthwhile, and lighthouses were not targets. Actions also had to be considered in light of the underwater submarine threat, always a real and present danger, (even at the end of the war a torpedo from the Austro–Hungarian boat U 31 damaged the light cruiser HMS *Weymouth* off Durazzo on 2 October 1918).

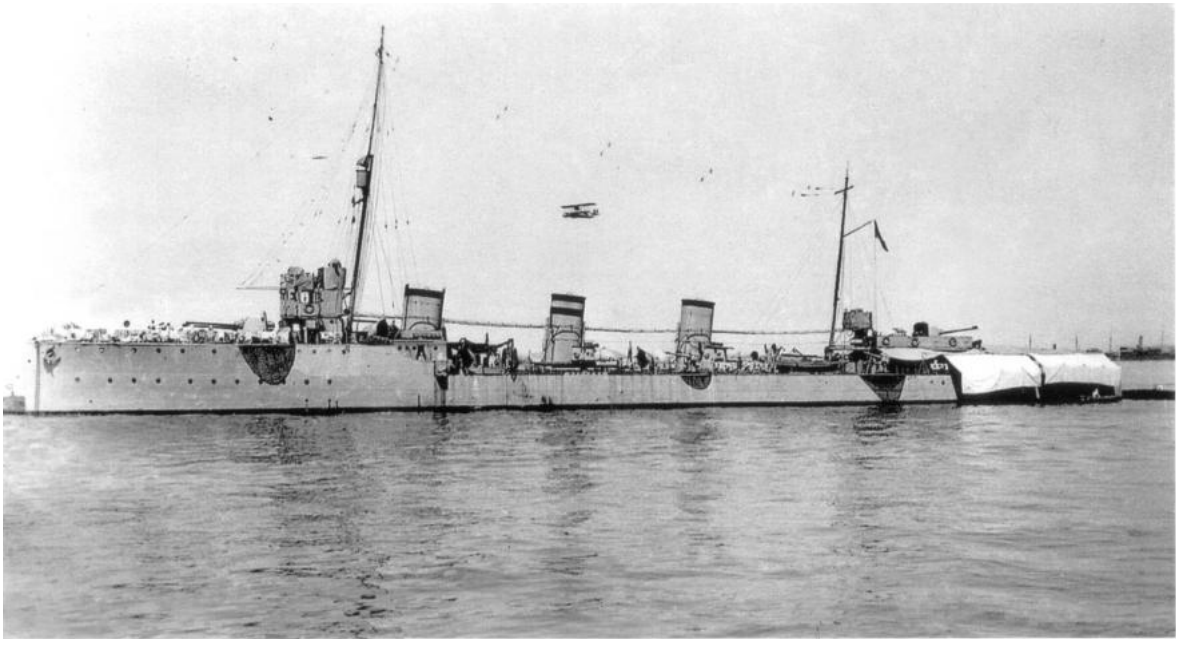
The battlefleet had to confront these dangers but it had to be worth it. Instead of letting the RM battleforce bleed white for nothing or, at best, for very little while the enemy saved its main force inside Pola, Italian battleships and armoured cruisers were to act as an anvil, and the expendable light forces (destroyers, torpedo boats, MAS boats, submarines and attack craft), used with aggressive tactical ingenuity, the hammer, striking the Habsburg fleet inside and outside its bases.

If the k.u.k. Kriegsmarine had to sortie and fight a general action, such an opportunity was welcome. If not, a naval blockade would exert a stranglehold on the Austria–Hungary fleet while the training and efficiency of its battleships at their moorings in Pola would decline daily. It was a strategy not dissimilar to the Royal Navy's in the North Sea, once the old concept of a close blockade was replaced, in 1904, by a distant blockade, seen in the stationing of the Grand Fleet at Scapa Flow.

AFTERMATH

After the victory, ambitious Italy, freed from the Habsburg threat in the north-east that it had experienced since the 16th century, was able to look to the Middle East for the country's plans for expansion, economic and otherwise.

Italy's indispensable naval tool, however, was worn-out and obsolete in comparison to the return *en plein force*, in 1919, of the Royal Navy at Malta. The superdreadnoughts - King George V class armed with 13.5in guns - and battlecruisers of the 1st Battle Squadron (all of them with fire-directors), accompanied by at least one fast seaplane carrier, were in a different league. A new Italian fleet had to be conceived and Thaon di Revel, appointed *Grande Ammiraglio* (the only one in the history of the Italian Navy) in 1924, became the RM's permanent counsellor with an office at the Navy Ministry. Modern battleships, considered everywhere to be the core of any fleet, would be ordered when the budget would allow, and they would be armed with powerful big



The light scout *Sparviero* in 1917. Ordered by Romania in 1913 and requisitioned by the RM in June 1915, the initial main armament of the four warships of this class (three old 6in guns, the lightest available for such a bore) was considered by mid-1917 to be too heavy and slow in firing. After the war, these vessels were the testbed of the new Italian 4.7in double and single mountings and of the new fire-control systems.

guns inspired by the 6in weapons Thaon di Revel had ordered in 1913 when searching for high muzzle velocity.

In November 1917, the Navy-manned Battery Amalfi (one of the twin 15in turrets of the never-completed battleship *Caracciolo*), built in 1916–17 to defend Venice from the sea, was able to destroy various bridges the Imperial Army was trying to build at San Donà, to cross the Piave River, at an elevation of 20° and a range of 20,770yds. It was land warfare, and the future ballistic of the new guns would be different, but it was a good omen. Torpedoes had also greatly improved using Austro–Hungarian patents, becoming reliable and effective, but they were conventional, and still showed their wake in the water.

Impressed by the fast Austro–Hungarian scouts, the RM ordered the heavy cruisers of the Trento class and six unprotected Condottieri light cruisers before passing, in 1925–30, to more balanced designs. Light scouts (*esploratori leggeri*) were welcome, as were submarines and attack craft. MAS boats, both of the very fast (*velocissimi*) and small types for the Adriatic, with big and seaworthy (*autocannoniere*) for high sea patrols (although diesel engine technology was not ready for this design) were also added. The members of the *Comitato degli ammiragli* (the consultative body of the Italian Navy) asked for a carrier in January 1921 admitting, however, that budget limits allowed, for the time being, only a fast seaplane carrier. The *Forza Aerea* (the new name adopted in 1920 for the Fleet Air Arm) needed no less than 280 aircraft, among them fighters, torpedo-bombers and reconnaissance planes, however the new Prime Minister, Mussolini, was only interested in the Air Force he created in 1923, and refused these last two items creating an unbalanced Navy.

Night actions in the Adriatic had been brief and indecisive skirmishes. Consequently the RM evolved little in this regard, just introducing the German star shells received in 1920 with some former *Kaiserliche Marine* light cruisers and destroyers; also the tracers the Austro–Hungarian Navy had used for the first time on 22 April 1918, crippling the British destroyers *Hornet* and *Jackal.* The Italian amphibian doctrine evolved too, but always on a one battalion at a time basis.

Awaiting the new warships, the old battlefleet was still useful as an instrument for diplomacy and intelligence. In 1917–18, Washington decided to rely on Italy to safeguard its rights in Bulgaria and Turkey. Rome asked for the necessary coal to recommission the two pre-dreadnought battleships *Vittorio Emanuele* and *Roma*. A specially fast shipment was delivered and the two Italian battleships were sent, despite British objections, to join the Allied fleet in the Aegean Sea. *Vittorio Emanuele* and the destroyer *Bronzetti* steamed up the Dardanelles (*Roma* remained in the Aegean Sea so as not to give the Italian fleet the same weight as the French). On 13 November 1918, they entered Constantinople, to join the Royal Navy dreadnoughts *Superb* and *Temeraire*, the pre-dreadnoughts *Lord Nelson* and *Agamennon*, the French pre-dreadnoughts *Justice* and *Democratie* and the Greek armoured cruiser *Averoff*. It was the first step in a new era of global recognition and challenges for the Italian fleet.

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INDEX

Figures in **bold** refer to illustrations.

Abruzzi, Duke of the 19, 24, 31–32, 38, 46
Acton, Adm Alfredo 56
aircraft and air warfare 28–29, 49, 65, 68
  blimps and airships 21, 29, 32
  bombers 42, 49
  flying boats 19, 20, **20,** 42, 49, 51
  Italian Navy Air Branch 20, 21, 41, 49, 77
Albania 10, 12, 13, 14, 16, 32, 44–45, 65
Allied forces 9, 16, 17, 18, 38, 45, 49, 50–51, 55, 56, 69–70, 71, 74–75
Allied Naval Conferences 18, 49
Ancona naval base, RM 10, 60, **60**
armoured cruisers
  Amalfi 19, 32, 45
  Carlo Alberto 19, 49
  Ferruccio Ferrucci 19, 45
  Garibaldi 19, 22, 36
  Garibaldi-class 12, 41, **41**
  Pisa 12, 19, 45, **45,** 49
  Pisa-class 12, 45, **45**
  San Giorgio 12, **12,** 19, 45
  San Marco 10, 19, 45
  Varese 19, 45
  Vittor Pisani 10, 19
Army, Imperial Austro–Hungarian 17–20, 32, 33, 41, 45, 50–51, 59, 62, 65, 68–69, 77
Army, Royal Italian 5–6, 13, 17–20, 25, 32, 33, 38, 41, 42, 46, 49, 50–51, 61, 65, 68–69, 70
attack craft, RM 22–23
Austria 5, 6, 70–74
Austro–Hungarian Empire 4, 5, 7, 8, 10, 12, 13, 14, 17, 20, 25–27, 28, 29, 46, 50, 60, 69–70

battleships
  Austro-Hungarian 5, 6–8, 14
    Szent István 27, **27,** 28, 61, 62
    Tegetthoff 14, 28, 61, 62, 71–72
    Viribus Unitis 14, 69, 71, **72,** 72
  Italian 5, 7, 8, 13, 32
    Andrea Doria 7, 21, 28
    Benedetto Brin 18, **18,** 19, 27
    Caracciolo-class 7, 21, 77
    Conte di Cavour **6,** 7, 8, 19
    Dandolo 9, **9,** 19
    Dante Alighieri 7, **7,** 13, 19, 65
    Duilio 4, 7, 21
    Emanuelle Filiberto 19, 49, 51, 54, 71
    Giulio Cesare 13, 19
    Leonardo da Vinci **5,** 5, 13, 19, 27
    Re Umberto **69**
    Regina Elena 19, 38, **38**
    Regina Margherita 8, **8,** 19, **42,** 45, 75
    Roma 19, 78
    Saint Bon 19, 49, 51, 54, 71
    Sardegna 9, **9**
    Vittorio Emanuele 19, 78
Belloni, Lt Angelo 23
blockades, naval 5–6, 9, 12, 17, 45, 50, 59, 76
Brindisi naval base, RM 9, **9,** 10, 18, 19, 27, 49, 71
Britain 4, 5, 6, 7, 8, 10, 13, 14, 18, 27, 42, 46, 60, 70

Cadorna, General Luigi 32, 50
Cagni, Adm Umberto 31–32, 71
Cattaro naval base 14, 16, 23, 27, 37–38, 55, 56, 59–60, 65, 69, 72
Central Powers 14, 16, 37, 50, 51, 54, 55, 65
Charles I, Habsburg Emperor 46, 54, 60, 68, 69, 74
Constantine of Greece, King 12, 45
Corsi, Adm Camillo 32, 46
Cortellazzo Action, RM 51, **52–53,** 54
Cusani Visconti, Adm Lorenzo 46
Czechoslovakia 68, 69, 70–71

Del Bono, Adm Alberto 46
destroyers, RM 10, 17, 19, 21, 28, 37, 41–42, 56, 61, 71, 75, 78
Diaz, Gen Armando 50
Dispositivo, Allied 38, 45, 61, 65
Durazzo naval base, Albania 10, 12, 23, 38, 65

the Entente 10, 13–14, 17, 18, 37–38, 44–45, 46, 50, 59, 65, 71

Fioravanzo, Lt Giuseppe 20
Fiume naval base 23, 28, 32, 42, **50,** 69, 71, **71**
France 4, 8, 10, 13, 14, 17, 18, 42, 46, 60, 73
Franz Joseph I, Kaiser 14, 17
frogmen, RM 23

Germany 4, 7, 8, 10, 12, 13–14, 17, 25, 26, 29, 38, 42–43, 46, 50, 60, 69, 70
Gravina, LtCdr Prince Manfredi 25, **25, 26**
Greece 12, 14, 17, 32, 37, 44–45, 55
Grillo climbing boat, RM 22–23, **23**

Habsburg Empire *see* Austro–Hungarian Empire
Horthy, Rear Adm Miklos 56, 60–62

import crisis (1917) 16
intelligence 25–27, 33, 62, 70
Isonzo, Eleventh Battle of the 50

jumping boats, RM 22–23

Kaiserliche Marine 12, 18, 50
  see also U-boats, German
k.u.k. Kriegsmarine 14, 16, 20, 51, 70, 76
  Helgoland scout 38, **39,** 72
  strategy and policy 6, 14, 18, 31, 61
  WWI industrial output 28–29

light cruisers, British 18, **29,** 36, 38, 56, 65, 76

Marine Nationale (MN), French 4–5, 8, 9, 12, 13, 17, 18, 36, 38, 44, 51, 72, 74–76
MAS boats, RM 21, **21,** 22–23, 25, 27, 28, 51, 54, 60, 61–62, 65, 77
Montanarella, SubLt Silvio 20, **20**
Monte Grappa (1917), Battle of 51

Njegovan, Adm Maximilian 45, 60

Otranto Barrage 18, 27, 28, 32, 37, 44, 56, 61–62, 65

Peschiera conference (1917) 50–51
Pola naval base 10, 14, 16, 23, 27, 28, 32, 42, 49, 59, 69, 71, 76
pontoons, RM artillery 20, 26, 27, 49, 58, 59, **59,** 64, **74**
Porto Rosega, Imperial Army attack 41
Prince Sixtus affair (1917) 46
protected cruisers, RM 19, 20, 26, 28

Regia Marina (Royal Italian Navy, RM) 4–6, 12–14, 16, 71–77
  combat
    N. Adriatic (1915–18) 30–32, 40–43, 46–51, **52–53,** 54, 58–62, **63,** 64
    S. Adriatic (1915–18) 33, 36–38, 43–45, 55–56, **57,** 58, 64–65, **66–67**
  Forze Navali riunite/L'Armata structure 19–20
  harbour-forcing operations 22–23, 25
  naval doctrine and strategy 5, 9, 18, 65, 76
  post-war fleet development 76–78
Rendina, Adm Emanuele Cutinelli 46
Rizzo, Lt Luigi 54, 61, 62
Royal Navy, British 6, 8, 10, 12, 16–18, 25–26, 36–38, 49–50, 56, 58, 71–76, 78
Russia 10, 13, 17, 18, 42, 73

San Giuliano, Marquis of 12, 13, 18
scout ships, RM 6, 9, **9,** 19, 20, 28, **29,** 38, 54, 54, 77
seaplane carriers, RM 19, 21, **22**
Sistiana, RM shell 33, **34–35**
Smuts, Gen Jan 60
Strait of Otranto Action (1917) 50, 56, **57**
Streit, Georgios 12, 14, 17
submarines 10, 19, 21, 23, 25, 28, 36, 42, 65, 75
  see also U-boats, German
supply lines/convoys 16, 29, 37–38, 42, 59

Taranto naval base, RM 10, 19, 27, 32, 45, 56
Thaon di Revel, RM CoS Adm Paolo 9, 10, 13, 18, 20–22, 24, **25,** 32–33, 37, 46, 50, 54, 65, 76–77
torpedo boats, RM 10, 19, 21, 25, 26, **26,** 28, 33, 42
Treaty of London (1915) 17, 46, 60
Treaty of Saint-Germain-en-Laye (1919) 72, 73
Triple Alliance (1882) 4, 10, 12

U-boats, German 16, 22, 25, 27, 28, 32, 37, 45, 56, 65, 75
United States of America 7, 13, 18, 68, 69, 71, 78

Valona naval base, RM 9, **13,** 19, 21, 42, **42,** 44–45
Venice naval base, RM 9–10, 19, **20,** 21, **23,** 31–32, 41, 42, 46, 50
Victor Emmanuele III of Italy, King 9, 13, 46, 50, 60
Vittorio Veneto (1918), Battle of 68–69
von Haus, Adm Anton 12, 14, 41, 45

weapons
  anti-aircraft and anti-submarine 22
  Crocco–Guidoni *Telebomba* 23
  fire control mechanisms 6–7, 8
  flying bombs 23
  guns 5, 9, 20, 22, **22,** 36, 37, 38, 42, 49, 51, 56, 64
    12in. guns 6, 27, 38, 58
    15in. guns 7, 49, 77
  mines 9, 10, 22, 26, 38, 69, 75
    self-propelled 23, 69, **70**
  torpedoes 21, 22, 33, 36, 61, 65, 77
  WWI production 28–29
Wilhelm II of German, Kaiser 54, 69

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Author's note

From 1870, the battlefleet of a united Italy was the decisive asset in its new foreign policy and economic development. Completely overhauled, despite a limited budget, from the beginning the *Regia Marina* (Royal Italian Navy, RM) had to face two very different threats: France and Austria–Hungary.

During World War I, the battlefleet fought a stubborn battle for the Adriatic Sea and, after hostilities ceased, against previous allies such as France and the UK.

Originality of thought, the trademark of the RM, was demonstrated between 1915 and 1918 when Admiral Paolo Thaon di Revel took command. A brilliant Italian officer, he favoured innovative ideas from his young officers; some worked, some didn't, but they were aggressive and daring, such as the use of midget submarines, frogmen and motor torpedo boats.

Naval actions in the Adriatic during World War I are generally little known about among English-speaking scholars and naval enthusiasts, which is curious given the involvement of many British and Australian warships. This book seeks to address that and give a detailed account of operations in the Adriatic during this time.

Photos

All photos in this book are courtesy of the Author's collection.